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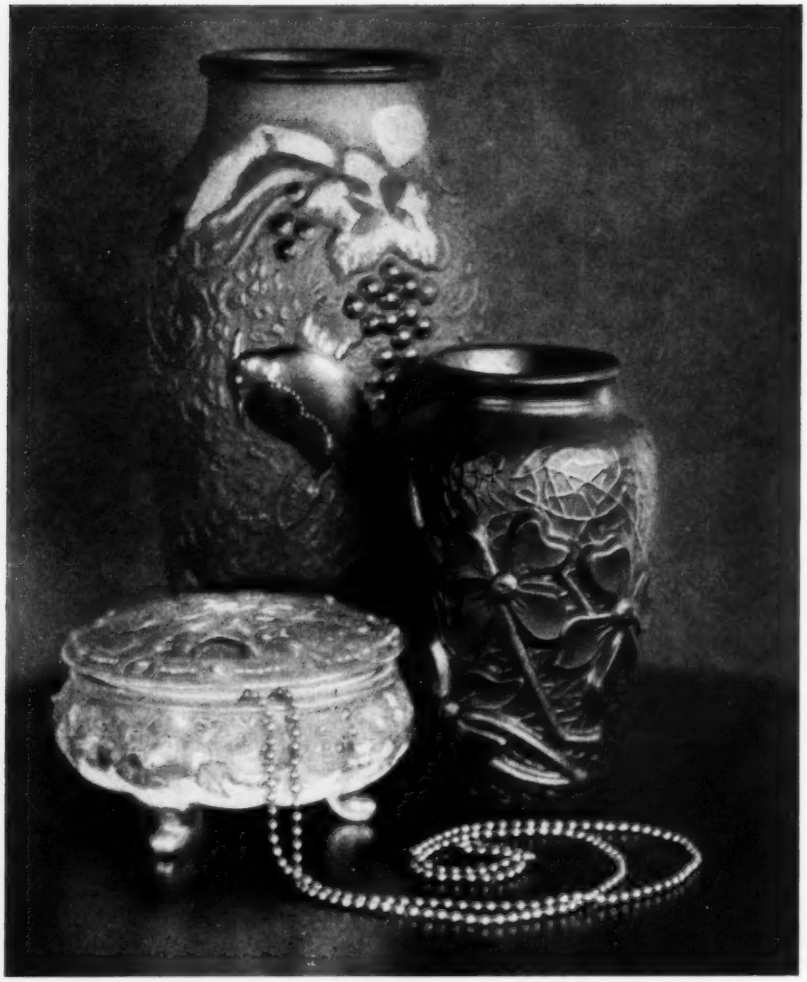

STILL-LIFE
U. STEPHEN JOHNSON
HONORABLE MENTION—MISCELLANEOUS

PHOTO-ERA MAGAZINE

The American Journal of Photography

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Photographing Here and There in Montana

MARTHA CURRY

MONTANA—How can one properly present her glories who has made only a few flying trips across her broad and fertile territory? The Treasure State, as she is called, was probably so named from the wealth of minerals which she has yielded up to man; but she gives no less lavishly to the photographer with time to study her varying moods and strength to explore her hidden wonderlands. Even the casual visitor like myself, with but a day here and there and only a miniature camera may bring home many a negative of interest, perhaps of pictorial value as well as memories of scenes impossible to photograph.

If our trip is by train, the time-table tells us we enter her Eastern boundary at 3.40 in the afternoon and the next afternoon at 2.46 we enter Idaho, and incidentally we have turned back our watches one hour at a place called Paradise. Twenty-four hours in crossing one state which has yielded to us even from the observation platform an almost unbelievable diversity of scenery and genre. As we enter from the eastward we have been passing through the Bad Lands, those brilliant buttes of burned out lignite, and here and there we see some of this formation in Montana. On the little Missouri which we cross almost at once, Roosevelt spent his western days and in this locality a number of cattle-ranches were owned and operated by French noblemen. Only recently The Bourbon flag was unfurled on Rushmore Mountain in South Dakota to commemorate the time when France ruled the Dakotas. Our first stop in Montana is Wibaux, named for one of these French gentlemen who used to own one of the largest cattle-ranches in the northwest and who left money in his will for the erection of his statue, that it might always overlook the land he loved so well. Alas! a recent visit disclosed the statue completely surrounded by the bunkers and greens of a country club, his granite eyes gazing stonily upon the progeny of the pioneers attired in plus-fours instead of chaps and wielding in place of the lariat a putter.

The picturesque days of the old cattle-range are gone; there came in its place the sheepherder with his flocks to overspread the plains. Then came that, accursed to them both, the *fence* and eastern Montana is now a farming country.

As we pass the little railroad stations we see an increasing number of grain-elevators which means better agricultural land and six or seven of these at dusk against masses of clouds would make us a study in rhythm. If we are traveling in the harvest-season we see large and deep box-wagons drawn by eight horses which may have come fifty miles or more bringing the precious wheat and the entire family for a very infrequent holiday and a little necessary shopping. I have acquired a great respect for the staff of life since learning of the privations which the "dry farmer" and his family have to endure. We shall see irrigated farms, great government-projects, a little further west.

The Yellowstone River is a frequent companion of ours, a mighty ochre-stream winding between banks of sand-color, with cottonwoods and cattle here and there or flowing along between vari-colored buttes.

Miles City, in the eastern part of the state is an interesting town, where in the city-park, I photographed the most wonderful trees I have ever seen, gigantic cottonwoods; but alas in my inexperience I did not see the telephone-pole, a tiny thing comparatively, raising itself presumptuously among its betters. This place in war-time was a picturesque spot, with its horse-market foreign buyers from the Allies, with its bevies of cowboys and cowgirls, who after the evening-meal would dash as fast as ponies could

ACROSS THE YELLOWSTONE MARTHA CURRY

carry them through the principal streets. But to this day the thought of the horse-market carries a touch of sadness. So many herds of range-horses we had passed, beautiful untamed creatures speeding with manes and tails outstretched away from our iron-horse. Perhaps I watched the breaking of these same animals which only twenty days found overseas and at the front.

Down in the southeastern corner of the state there are thousands of acres of waste land which they call "gumbo flats"; that which caused them is to be explained by geology; but what they cause after a sudden shower or after a week's rain is only to be told by the irate motorist who discovers himself heading east when a moment before he believed himself on the way to the coast. I should explain that in Montana there is only one coast, the Pacific.

On a beautiful June day, however, they are of mysterious and incredible charm as we drive for miles and miles over gumbo flats which are not *flats* at all, but billows of a great gray green ocean of sagebrush and cactus all abloom with its blossoms of pale yellow and violet and pink, and thousands of tiny prairie-roses nodding in the breeze. Our road is always on the crest of the wave. Out on the gumbo flats the traveler is apt to make his own road; and always where the drainage is likely to be best for a sudden shower may work a tragic change in road-conditions. There isn't a sound, except the purr of the motor, or a living creature to be seen or even the smoke from an unseen habitation as far as the eye can reach—just sagebrush and cactus and the lovely ultramarine shadows which flit across the distant sagebrush-waves. And so when two cowboys traveling across country are met, it is an event to be celebrated by the exposure of a plate.

Pompey's Pillar should not be missed, an oval rock two hundred feet high, for here Captain Clark of the Lewis and Clark expedition climbed and carved his name in 1806. A record-picture can be made from the observation-platform.

Gradually the landscape changes, and we commense to catch glimpses of the mountains; and, if we are of those who feel their call, the hours will pass slowly until we feel ourselves rising among them and watching the disclosure of height after height. Never cross the mountains at night. Await a morning train rather than miss an experience ever new.

But to motor over the Continental Divide, which we did from Helena into the Blackfoot Valley was best of all. On a June day, when the foliage in the higher altitudes was still that soft young green against the pines, and with the wealth of spring-flowers beside the road which made every turn a delightful picture, we found

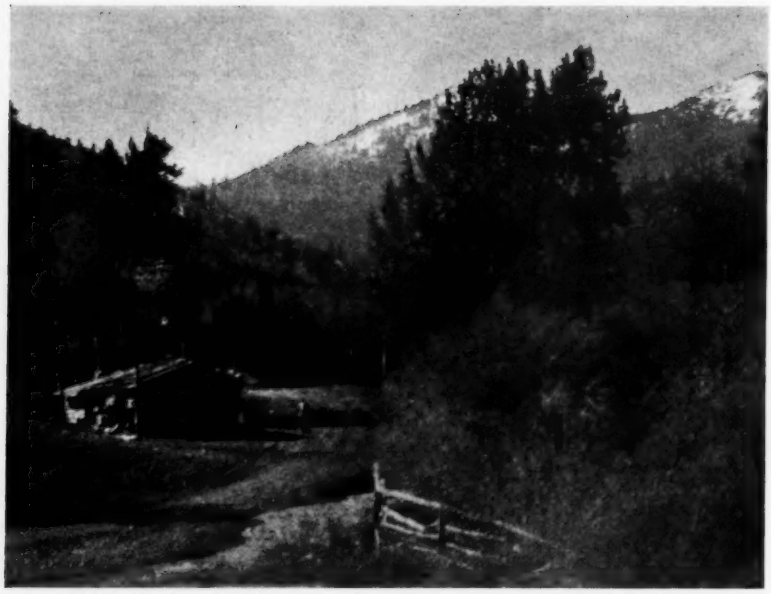
THE RIDERS OF GUMBO FLATS — MARTHA CURRY

ourselves winding from one direction to another, always upward, until a final right-hand turn brought us "west of the Divide." Forest-covered mountains, as far as the eye could reach, seemed to roll away into the dim distance and down among them we were to discover our valley, which extends a hundred miles or more to the southwest, a fertile country of great beauty.

Here are many large irrigated ranches given over to the raising of horses, cattle and hay. One day our host sent his men up into the mountains to round up some of his Herefords so that I might make pictures of them. In a high Concord buggy behind a span of prancing black horses we drove across the fields, fording Alice Creek, on through the forest to the clearing where the cattle had been driven. The men on horseback herded them in our direction and my little Graflex was kept busy for a while.

There was so much to photograph on that ranch, the mountain-roads, the rivers Alice Creek and Little Blackfoot, the repairing of the irrigation-dam, the splendid horses in the corrals and the pretty school-teacher smiling in the doorway of the little log schoolhouse. I even knelt patiently before the entrance to his home and caught the picture of a little gopher which struck an attitude of prayer on emerging. I think with regret of a little pond, half encircled with pine-trees, nestling in a hollow about a half mile from the ranch-house. There, elk came to drink in the early evening; but I, after a day out of doors in that glorious mountain-air remained at ease well back from the vast fire-place listening to stories of earlier days.

A visit to Ruby Valley, one of the oldest sections of the state is a unique experience. Here was the discovery of gold at Alder Gulch, here the thrilling road-agents and the more thrilling Vigillantes made history; old Virginia City is here, the first state capitol and you will find more of the old pioneer spirit than in many other sections. There is still mining, hydraulic dredging in the upper end of the valley, cattle and sheep raising. In mid-January hundreds of sheep were grazing along the Ruby River. There was no snow except on the foot-



HOMESTEAD CABIN MARTHA CURRY

hills and the air was soft and balmy. "I sent east for a cutter and it was sixteen years before I could have a sleigh-ride," an old settler told me in describing the climate of his valley. A solitary horse grazing beneath a bizarre and threatening sky, his background the Ruby Mountains, was one photograph which I made on the outskirts of Sheridan. "The Haunted Tavern" as I have renamed "Robber's Roost" is that old roadhouse of a hundred mysteries in the days following the gold rush. So staunch it stands overlooking the valley that it will be a sinister landmark for many years to come.

The Jefferson River is formed by the junction of the Beaverhead and Ruby rivers, and as we were going eastward through Jefferson Canyon we met a local train on a siding and a flying cloud with its attendant shadow made an interesting study in chiaroscuro.

October is a delightful month in which to visit the Treasure State. Entering Montana in the late afternoon it was not until morning that the scenery revealed itself. I had arisen early that I might not miss Montana Canyon. I was awaiting breakfast, looking up at the sky, where clouds white and wild were flying above the richly colored walls of the canyon; now and then a ledge held some variety of fir-tree and more of them were to be seen along the water's edge. And the stream, no Yellowstone this; but a stream of that transparent green so characteristic of Rocky Mountain rivers. Easily our electrified train glided through this wonderland when suddenly appeared life to make the picture complete. Below those varicolored walls, enriched by the dark green of the fir-trees in a little emerald pool floated three white swans. A picture not to be photographed but which I can never forget.

And if this were not enough of a treasure to find in one day, I discovered the glory of autumn in the Rockies. The foliage of the deciduous trees turns; but not to the colors with which we easterners are familiar. There isn't a bit of indecision about a single leaf—gold color, crimson, or a deep capucine they flaunt their beauty against the dusky green pines. The more distant mountains look in their somber hue as though alight with tiny candle flames and the leaves of these same trees close at hand are a pure transluscent gold in the brilliant sunlight. And so, after a day filled with the beauty and majesty of the mountains we glided down through Hell Gate into Missoula. In the morning a few hours' ride up into the Flathead Valley was to follow. As we left the city, our train climbed

"WESTWARD HO!" MARTHA CURRY

upward and upward, keeping always in sight as it circled above the "Frenchtown Flats" an ideal ranch, its orchards, gardens and spacious buildings poplar encircled in the midst of its fertile acres. Our train turned sharply as it reached Corican Divide, named for a South Sea Islander, who while a member of a scouting-party was surprised and killed by the savage Blackfeet. This narrow pass is a gateway between Missoula and Flathead Valleys and from our height we looked down to a tiny ribbon of a road between the almost perpendicular mountain-sides.

At Dixon we left the main line and here is a remarkable view of the Mission Range, snow crowned and forbidding. We traveled up the productive Flathead Valley until we reached the point which gave us the first glimpse of our destination, another never-to-be-forgotten picture. Beneath a turquoise sky with cumulous clouds lay Flathead Lake of color scarcely a shade darker than the blue of the firmament, framed by mountains, their peaks veiled in mist, dotted in the middle distance with islands, forest covered, gorgeous in their autumn-glory; and in the foreground golden trees, and fences a riot of crimson vine.

A panorama of only a few moments' duration and we glided down into the little town of Polson at the foot of the lake which offers many features of interest, particularly the drive along the east shore, a splendid road cut on the mountain-side, high above the water and the rocky gorge below the lake's outlet through which the Flathead River tumbles so madly, forming the largest undeveloped water-power in the United States.

On the day when we approached the wharf to continue our journey northward, I saw with amazement the vessel in which we were to embark for the forty-mile trip to the head of the lake. Small and squatty as she appeared, she disclosed, at closer viewpoint, sturdiness and we clambered aboard and around her little cabin

IN THE SHADOW OF THE RUBY MOUNTAINS
A HERD OF HEREFORDS
MARTHA CURRY

and found seats on a trunk on her single deck. A calm and cloudless day seemed to preclude any chance of shipwreck. Straight up the lake our little steamer sailed until an S. O. S. by whistle brought her sharply to the left where near the western shore a steamer scarcely larger than our own, but heavily laden with lumber, was fast on the rocks. With a hawser we played the good Samaritan for an hour or so while the crew of the other boat tried to work it free with poles. At last success came, and we were at liberty to continue our journey. An exciting interlude.

The next day we were at Lake MacDonald which, long and slender, lies mountain encompassed at the southwestern corner of Glacier Park. Of irregular outline its shores are heavily timbered and there is a striking grouping of mountains at the upper end. I was fortunate enough to obtain several pictures which help to refresh memories of this lovely spot as I saw it in its October splendor. Bad Rock Canyon, through which we followed the south fork of the Flathead back to Columbia Falls, was well named. Up and down among gigantic boulders the narrow road clung to the canyon-walls, and below swirled and flashed the rapids of the river. During the season, it is possible to take the trip of seventeen miles by canoe at a cost of twenty-five dollars per passenger.

And if it were not an impossible undertaking, this same canoe might carry us down through Flathead Lake, its river with that rocky gorge and those awe-inspiring falls, onward to Clark's Fork of the Columbia, a crystal clear green river, which carries westward through lovely scenery other waters which we have seen in the Blackfoot Valley.

I would like to tell you of a sub-zero trip into this valley from its western end through Blackfoot Canyon, of a tiny hotel there where we saw our breakfast-to-be the night before, when a smiling hostess brought for our inspection a whole dishpan filled with rainbow trout; of another little country-inn whose doors had no keys, for "no one ever locks up anything in this valley"; more amusing in retrospect than at the time.

I wish I had a photograph of the tiniest of log-houses, an inn whose landlord was so thoroughly western from his Stetson to his "you bet"; but who proved to be a civil engineer from Boston in love with a Canyon.

Dear as my memories of Montana are to me, I realize that I have only a jewel here and there from among her wonderful treasures. There await so many different experiences and such pictures of varied interest to every one who visits her with open eyes and well-filled plateholders.

For those with the time and inclination, there are several Indian reservations where acquaintance might lead to the discovery of much pictorial material. And last, which perhaps should have been mentioned first, our National Park Glacier, which lies wholly within Montana's bounderies, and Yellowstone which lies for only two miles within the state along its northern border but which should surely be included in a visit to Montana.

The Status of Photography in Hawaii

ARIEL E. V. DUNN

THE Honolulu Photographers Association has just been organised with an initial membership of twenty, including Chinese and white photographers. Membership numbers industrial photographers, portrait photographers and photo-supply men. Although classified generally as either "commercial" or "portrait" photographers, there are few who will not duplicate in either line.

The new association does not include Japanese photographers, who for three years have had an organisation of their own—a very efficient one, too, it seems, so far as co-operation and elimination of price-cutting is concerned. For a time, a rule of the association forbade any cutting of standard prices, and exacted a forfeit of $300 from an offender. It is not known whether anyone was ever forced to thus enrich the coffers; but, at any rate, the results were evident. The Japanese Photographers Association holds regular monthly meetings, and the members seem to work together quite harmoniously.

The main reason for the organisation of the Honolulu Photographers Association was the desire to standardise the profession on the island, and to effect an agreement on prices. M. F. Long, proprietor of the Camera Shop, supply-house, and master finisher, was active in organising the photographers, and was elected secretary of the body. Through Mr. Long, the photographers in Honolulu got in touch with the San

Francisco Association, who sent the price-list adopted in the Bay City and other forms, thus aiding materially in the perfecting of the organisation-plans. The Honolulu Association will probably adopt the San Francisco price-list as a whole.

Up until this time, prices charged in Honolulu and in other places on the islands, have been usually lower than prices obtained elsewhere. Local conditions have been largely responsible. In all of the Hawaiian islands, there are some 10,000 white persons, about half of these ranking under the classification "standard prosperous Americans", these including commissioned officers and their wives at the Army and Navy posts. Really only 5,000 good prospects in all of the islands, and fifty-seven Japanese photographers alone! The white people, however, do not go to the Oriental photographers, except for passport-pictures. And it is estimated that not one-tenth of one per cent. of the Oriental population patronises the studios of white photographers.

So to stimulate trade, it has up until this time seemed necessary to work for just a little less, industrial work being quoted at one-third to one-half of the valuation placed on the same type of work on the "mainland". Window-flashlights are made for as low as $2. Extra prints of an 8 x 10 negative are fifty cents. There are some photographers on the islands who work only half time, eking out an income by following some other line as well. Then there are the traveling photographers, the kind of cut-throat artists known to all professions and trades. One of them was discovered to be selling 8 x 10 squeegee prints from negatives for eighteen cents.

Honolulu photographers consider that business during 1925 was the poorest since 1916. Circumstances seemingly have made it particularly difficult for the portrait-photographer. People have thought the cost of a really good photograph too much, and have gone on thinking in terms of what the picture in the old cabinet photograph in the family-album cost. Photographers on the island of Oahu used to prosper on the trade of the soldiers at Army posts and sailors at Pearl Harbor; but the government has recently cut wages in drastic fashion. Soldiers had their wages cut from $31 to $21 a month, which does not leave much of a margin for the photographer to work on.

Portrait photographers have tried to stimulate an all-year around business by selling coupons, with varied results. Coupons sell readily to girls working in laundries and industrial plants. The wife of the Japanese yard-boy who receives a salary of perhaps $30 a month, may buy one, if the coupon sells for only fifty cents. The Hawaiians, especially the laboring classes, go in for buying coupons; but the photographer is often lucky if he gets the first fifty cents paid for the coupon. At least a dozen coupon-men have come to Hawaii from the states, and "gone broke".

In spite of this gloomy picture just sketched, the photographers of Honolulu are optimistic in their belief that it is now the beginning of a new era for them, and that business will be better this year. And at least two of the industrial photographers in Honolulu have always worked at Coast prices, and have been able to get them.

Big business on the island of Oahu, on which Honolulu is situated, is controlled by a few. The president of one large concern is vice-president of another, and on the board of directors of some industrial project. Business, of course, is not exactly conducted on a friendship basis; but a photographer who pleases an official of one company is likely to find calls from another concern with which this official is associated. This is particularly true in the field of industrial photography.

And most of the photographers in Honolulu turn out excellent work, comparable to the best in any large city on the "mainland". Despite the fact that Hawaii is tropical, or at least semi-tropical, atmospheric conditions are not very much different, as there is only little more humidity; and, as far as the professional photographer is concerned, at least, he requires no special equipment. Of course, the rich, yellow light reduces speed a trifle, and the green coloring must be taken into consideration; for there are more deeper greens than gray greens, and the grays are of the burned variety.

Views of the islands are in great demand by the thousands of tourists who visit Hawaii each year. Almost any day out at Waikiki Beach, photographers will be seen making permanent record of some beautiful scene. And such wealth of material there is at hand! Gorgeous bloom and foliage, daring surf riders, marvelous sunsets with sun sinking into the ocean; slender, graceful palm-trees, and interesting native groups. Tropical scenes are truly an inspiration to real artistry! Practically all of the island photographers have their own negatives in stock, from which they sell these scenic views, most of them colored.

An annual exhibition for both amateur and professional photographers is held in Honolulu in September. First prizes in the professional classes last year were taken by two white photographers in Honolulu, and second prize was taken by a Japanese photographer on the island of Kauai.

MEDITATION
BORIS CHUDADOFF
HONORABLE MENTION—MISCELLANEOUS

The Japanese photographers as a class do extremely good work; but they are not so versatile in originating as the white photographers.

Up until a few months ago when the photo-supply men got together and made an agreement on price-discounts, there was more or less friction there. Discounts varied with different houses, but were often as much as fifteen per cent. on paper, twenty per cent. on cut-film, and fifteen per cent. on chemicals. The standard discounts now are ten per cent. straight through from the list-price to photographers, and to dealers twenty per cent. on cameras, and eighteen per cent. on roll-films. On special order, materials which the wholesale house does not have to stock, and where the patron is willing to wait for three weeks delivery from the mainland, Pacific Coast prices are met.

Credit is very tight, for the wholesaler has to bring material 2,200 miles or more, and has to wait six weeks from the time he sends the cash with his order until he receives the stock. Traveling photographers will find Honolulu one of the tightest credit cities in the world; and, if credit is refused at one house, it will be refused everywhere. Orders taken by the supply houses are quite often small, the Japanese photographers ordering less than case lots.

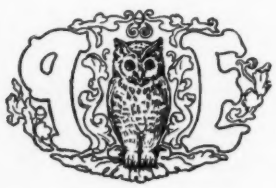
There are three supply companies in Honolulu, the Honolulu Photo-Supply Company, Wadsworth's—formerly the Hawaii Photo-Material Co.—and the Camera Shop, a newer firm than the other two. All of these concerns do a master photo-finishing business.

On the other islands, there are few supply houses. In the city of Hilo on Hawaii, a drug-store supplies a limited amount of materials; on Maui, there are three Eastman agencies, and on Kauai, no agency.

Down-town business locations for photographers and supply houses in Honolulu are very expensive, as there seems to be a combination on real-estate, and the owners want to get twelve per cent. income clear on their watered investment. Another reason for high rents is the limited extent of the business center due to the peculiar shape of the harbor. Taxes too are sky high, and the tenants of the building are the ones who must pay. To add to other troubles, termites—or small boring worms—infest the photographers' supplies. These sturdy little creatures go through practically any materials except metals. They bore right through concrete and brick; but their specialty is eating wood. One of the photo-supply houses in Honolulu has just had to replace all of its show-cases because the termites ate them up, just leaving the shell of the wood. The outside of the wood looked sound until it began to crumble at the last, and so the store-manager was not even aware of the existence of the pest.

Besides the industrial photographers operating right out of Honolulu, there are those who specialise in work at the Army and Navy posts. There are three such at Pearl Harbor, the large naval post, and two white men and one Japanese photographer at Schofield Barracks, which in itself is a small city of 14,000 persons including officers and their families.

There are, of course, many amateur photographers in Hawaii; for everyone who comes there makes pictures. And besides the supply houses who all do photo-finishing, there are the agencies in virtually all the drug stores, the largest and best known being the four stores of Benson, Smith & Co.; Holister Drug Co.; Meyer Drug Co.; and the Kaimuki Drug Company. Besides the regular work in Honolulu, the master photo-finishers turn out quantities of work for the Pacific steamships which make this Polynesian city their port of call. As the ships are often in the harbor only a very short time the photo-finishers have to be prepared to do rush work.



A Day at School with My Kodak

WILLIAM F. ROSS

I WAS busy arranging some pictures in my album. My ideas had given out. I had photographed everything of interest in town. What would be my next subjects? Like a flash I remembered that Miss Cross had given me a list of things to make for the annual. She was faculty adviser and I an associate editor. This position and my hobby had given me the place of staff-photographer also.

I laid aside my trimming-board and took out the list. What a job I had before me! Principal's private office, assistant principal, library, assembly, and classroom were only the beginning. My legs were playing a tune, and I nearly decided to tender my resignation. But I was a camera enthusiast and hopes of some good pictures loomed up before me. I would try anyway.

The following morning neighbors might have seen a suspicious looking hump on my right hip as I went down the street to catch the car. But those who knew me well only smiled and said, "There goes that Ross boy with his Kodak again". I felt confident; for that hump was a Kodak, Series III, with Kodak Anastigmat F/6.3 lens. I was sure that it would make sharp pictures if I did my part and used the correct exposures.

At 8.50 Monday morning we have an assembly. This was my only chance to get that picture during the week. Much to my satisfaction I found that there was a light at the back of the auditorium to which I could easily fasten my optipod. Although tripods are more useful in some cases, I believe that for general work the optipod is the handiest and most convenient attachment of its kind. In order to get a good picture I sacrificed speed and used stop F/11. I also had to use a short exposure to keep the main subjects from being blurred.

The classroom proved a comparatively easy task. I chose a teacher who I knew would be willing to join in the fun, and set up my apparatus. Stop F/11 and an exposure of 8 seconds resulted in a very good picture.

The principal's inner office was the sanctum sanctorum. Many a gruesome tale had I heard about it. Although he is famous for his steadfastness, I found him pregnable to an attack with the Kodak. He not only allowed me to tear up the room to get the correct lighting, but helped to push several extra pieces of furniture out of the way. On the spur of the moment I neglected to get a good background for his head, but the remainder was very good. The assistant principal was soon photographed, and I checked her from my list.

The next picture was the library, and I saw no reason that this should not contain the librarian. Lighting-conditions were fine, and I succeeded in getting one of the sharpest of the day. When I show this picture to friends, I take no small pride in pointing to the case of trophies in the background.

Soon I had finished the list given me by Miss Cross. I breathed a sigh of relief and prepared to go home to develop the pictures, but my plans fell through with a crash. I had hardly slipped my Kodak into its case when Margaret Roe, a member of the staff, approached me.

"William," she was saying, "I have been looking for you everywhere. Miss Cross told me to get those pictures for the advertisements taken today."

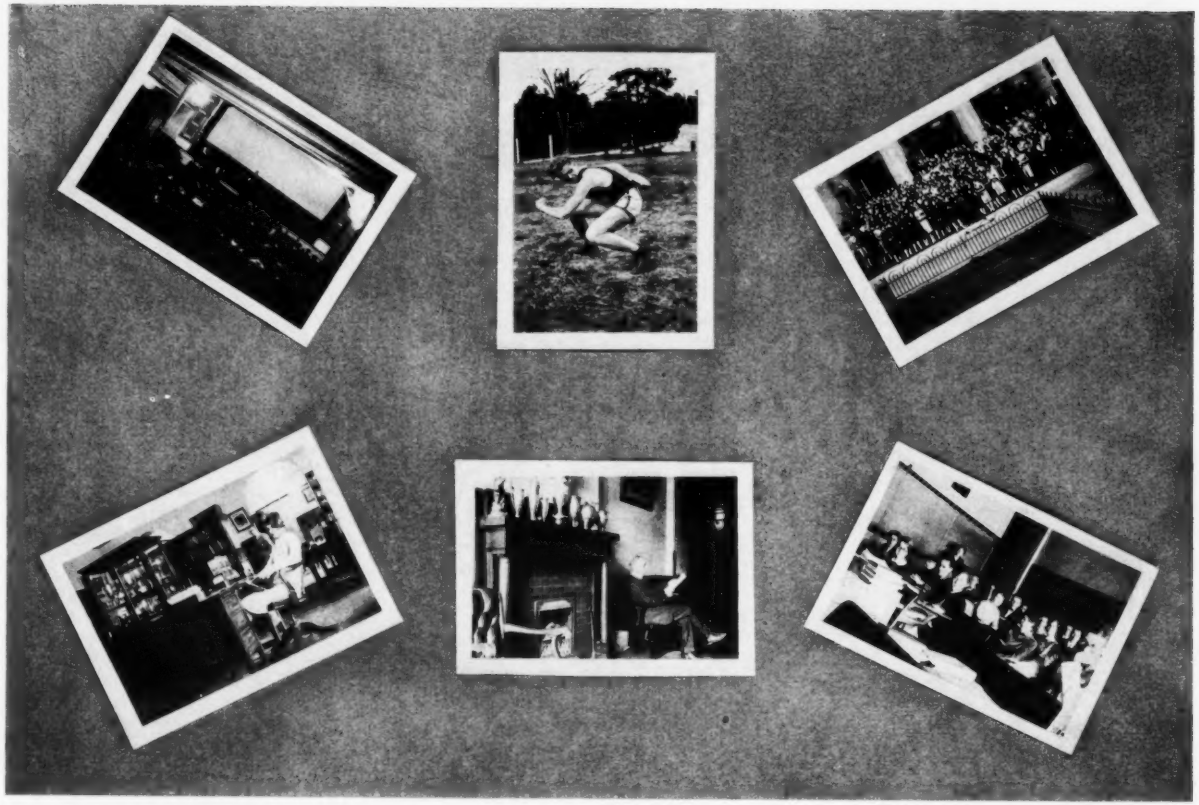
"What advertisements?" I asked. I wondered when I had gone into the advertising business.

"Oh, you know. We want to get some funny pictures and put advertising slogans under them."

Well, I was glad it was not the principal again. She had soon explained this scheme in full, and we set out to find our subjects.

"Fifteen Minutes a Day" was a well-known slogan. What picture could we get to suit it? After several minutes of the hardest thinking possible we found one: "Pinky" Ellison studying. Everyone knew that he opened his books about fifteen minutes a week, and he was just the kind of person that is always ready to do anything for a friend. We soon explained his part to him. He was to look studious for awhile. Several Webster's Dictionaries and class books added to this effect. An exposure of 5 seconds at F/16 resulted in the most contrasty negative that I have ever seen. With Contrast No. I Azo I was able to get a very good print.

"There's a Reason" was another slogan which we wanted to use. A boy with the imprint of a girl's lips on his face was just the thing. But where was the boy willing to be "painted up"? We scurried around the halls trying to find one, but all flatly refused. Finally we had to go back to "Pinky", although we considered it a bad policy to have too many pictures of one person in the annual. Margaret fixed two dainty red lips on his cheek. I knew that these would be too small to be seen, and so I put a hand in the make-up. No danger of mine not being



Assembly
The Library

The Discus-Thrower
The Principal

Cheer-Practice
A Classroom

HIGH-SCHOOL PICTURES

WILLIAM F. ROSS

noticed! It looked more as if "Pinky" had been flirting with a cow. We had soon "shot" him and began on the next.

This was to represent "That Schoolgirl Complexion". We did not need to make many arrangements for this, because the donning of a schoolgirl's complexion is seen too often in a classroom. Only a girl and the so-called paint box was necessary. We soon made this.

A local newspaper has a sentence which it uses to fill in space: "The —— covers Richmond like a roof". Margaret had thought of a very good picture for this. Only, a boy with unusually large feet was necessary. We had him prop his pedal extremities on a desk and were about to make the picture when he suddenly became bashful; indeed, so bashful that we had to cover up his head to prevent any future recognition. I succeeded in getting a very sharp and well-exposed picture this time.

We made quite a few others which I will not stop to mention because I fear they will prove uninteresting to the reader. I returned home and developed the films in my Kodak Film-Tank. I have been greatly pleased with the service given by this apparatus. I used to develop my films by running them up and down in a tray. I seldom got a correctly developed roll. They would be either under- or over-developed. I have never done this with my tank. All of my negatives are well developed and have plenty of "pep". Besides this, the tank eliminates the necessity of a darkroom.

The following day I made some pictures of the track team. The day was very dark, and I was somewhat doubtful of my results. I knew that it would be impossible to get good action-pictures, so I got the fellows to remain in a certain position long enough for a 1/25 second exposure. I used stop F/6.3.

This finished my photographic experiences at school. I made about fifty pictures, out of which only two or three were total failures. None were made out of focus, several were somewhat under exposed, but not enough to prevent good prints, many of these were exceptional for their sharpness. All, whether good or bad, will be treasures to me when I grow up and look back over my days at John Marshall High.

Now that the actual work had been completed, my conversation naturally turned to this subject of photography. While we were standing on the corner during recess, we discussed its various outlooks and opportunities. Although some dissented, I am sure that the majority thought it of great value both to the individual and to the school. Some even wished that it were taught as a subject like English or Mathematics. This would be both instructive and helpful. If it were taught, many mistakes which we make in making pictures would be prevented. Many more pictures of pictorial value would be scattered throughout the country. I have heard that many schools of the Western states teach photography. Is that the reason that many of the prizes offered by magazines go to the West?

Then we discussed its use in teaching other subjects. Would it be advantageous in English or in Chemistry? Would a time ever come when classrooms would have their own motion-picture machines?

An English class would be much more interesting if we had pictures in front of us as we studied a man's life. Let us say that we are studying Longfellow; that we are reading his life. "Henry Wadsworth Longfellow was born in Portland, Me. . . ." There is a picture of Longfellow's early home on a screen before us. As we continue his life, other pictures are seen. When test-time comes, we will remember more vividly what has been covered.

Let us next go to a History class. We are studying the Revolution, the surrender of Cornwallis at Yorktown. We see Washington there, and here is General Lincoln receiving the surrender of the English general's sword: many pictures of this type have already been made and could be used for such a purpose. "The Birth of a Nation", "America", and "The Big Parade" are three productions of this class.

Motion-pictures would be of untold value in geography. Various magazines like the *National Geographic* prove this. We would become much better acquainted with the people and customs of different parts of the world.

Then let us consider the classes in science. In zoölogy we would see the life-processes of insects. We would see how the starfish gets its food, and how it shoots out its stomach and digests it. In chemistry large chemical plants could be shown. We could see how the various coal-tar products are obtained from a dark, stiff liquid. In physics various electrical devices which are too costly for the average school could be seen. The student would be taught many things unheard of several years ago.

These discussions on the corner led to the classrooms and then to the teachers, who expressed their ideas about the subject. All, regardless of what they taught, thought that both still and motion-pictures would be of great value. Miss Cross, mentioned before as faculty adviser of the annual, "put it all in a nut shell". She said:

"The use of pictures in the schoolroom is becoming more popular every year. It is gen-

erally accepted that the appeal to the eye is both easier and more lasting than appeal to the ear. Where the picture has been made by a member of the class, the personal touch is very valuable. In History, English, Botany, or Nature-Study the camera can be used to great advantage."

[This article should be of particular interest and value to students and teachers of elementary schools. The author has recorded his experiences for the benefit of others of High School age, and we believe that he has shown convincing evidence of being a good student and a very good photographer. Very true this article may not teach the advanced worker or pictorialist very much, and he may question our including it in these pages. However, we know that the young people of the country are taking an increasing practical interest in photography. We know that in a very few years many of the present "stars" in the pictorial firmament will grow dim and will shine no more. Who but the younger generation will take their places, and why should any pictorialist question the advisability to give our young people reasonable space in our pages? We may be wrong, but we believe that several High-School boys and girls that we know will some day be heard from in the pictorial salons of the world. They need encouragement, the schools and colleges need encouragement and support in their photographic work. We intend to give them all the help we can, and we ask our readers to do likewise.—EDITOR.]

The Russell Effect in Photography

LYMAN CHALKLEY, Jr.

WITHIN the last few years it has been shown that light has a beneficial effect upon rickets. Now it is also known that cod-liver oil has a beneficial effect upon this same disease. Therefore, it occurred to some Yale scientists that cod-liver oil might give off light in the body, the idea being that light might be evolved during the oxidation of the cod-liver oil in the blood. This novel idea of internal illumination was put to the test. Cod-liver oil was oxidised in the presence of a medium chemically somewhat similar to blood, and a photographic plate was placed near the mixture. The plate was fogged. This fogged plate was confirmation of the brilliant theory of the curative action of cod-liver oil[1]!

But when efforts were made to obtain more quantitative data, the photographic plates were found to behave in peculiar and erratic ways. After much work, it was concluded that the cod-liver oil never had given off any light; the plate had been fogged by the Russell Effect[2].

Very few scientists or photographers realise how readily photographic plates may be fogged by agencies other than light. For years, scientists have used photographic plates to record the presence of light, both visible and invisible. And, every now and then, plates show images produced by the Russell Effect, and there is much confusion and waste of effort before the true cause of the image is discovered.

Probably most of the readers of this article have never heard of the Russell Effect. However, all photographers are familiar with one or two instances of it. The fogging of plates by storage in plateholders, and the fog produced by storage of plates in contact with ordinary paper are cases of the Russell Effect. But these are only two illustrations of the phenomenon. In general, the Russell Effect covers the cases of the production of latent fog, as distinct from stain, by storage of sensitive photographic materials close to, or in contact with, any of a variety of substances.

The effect is one of chemical fog; but it frequently does not appear at the first glance to be such. For instance, storage of a plate close to a bright piece of zinc will cause the plate to fog. However, except for the fog, there may be no visible evidence of any chemical action on the plate or of anything more than, at most, a normal slight tarnishing of the zinc. The effect of storage of a plate near zinc is not a stain, but the production of a true latent image which appears only on development.

This puzzling effect has been the subject of a number of investigations. The phenomenon was observed eighty-five years ago by a scientist named Moser[3]. Of course, Moser did not realise he had a new photographic effect; he believed, instead, that he had discovered new sources and kinds of light.

The most extensive studies were made by W. J. Russell[4], after whom the phenomenon is named. Russell proposed the explanation which is now accepted. Russell's theory is based on the following two facts: (1) certain metals and numerous other substances react with ordinary air to form hydrogen-peroxide; (2) hydrogen-

SUNBEAM ANNE H. MELLIN
HONORABLE MENTION—MISCELLANEOUS

peroxide is violatile, and its vapors have the power of fogging, *i.e.*, producing a latent image on photographic plates, films, and papers. Just how the peroxide is formed in the first place is a complicated question, and will not be gone into. But the facts are that hydrogen-peroxide is formed by the action of air on many common substances, and it has the power to fog sensitive emulsions.

Of the substances which react with air to form hydrogen-peroxide some, such as turpentine and essential oils, are volatile, and others, such as the metals, are not appreciably so. A plate has to be fairly close to, or in contact with, the non-volatile substances to be fogged. "Fairly close to" means within about ½ inch, provided that the "exposure" is not prolonged for many weeks. The more volatile materials can act through greater distances. The difference is purely relative, for hydrogen-peroxide itself is volatile, and there are not enough data available to make possible a classification of substances on this basis. However, this consideration should be borne in mind in judging the activity of the substances named in the following list.

Some of the substances which have been reported to produce the Russell Effect are listed below:

SOME SUBSTANCES WHICH PRODUCE THE RUSSELL EFFECT

Aluminium
Cadmium
Cobalt
Lead
Magnesium
Nickel
Zinc

Abietic acid
Benzaldehyde
Retene

Drying oils, such as linseed
Essential oils generally
Olive oil
Turpentine

Rosin
Shellac
Canada Balsam
Copal Resin
Mastic Resin
Printing Ink

Wood
Paper
Cotton
Silk
Leather
Feathers

NO WATER LEONARD PURIN
HONORABLE MENTION—MISCELLANEOUS

It will be seen from this list that a wide variety of substances can fog plates. And the list is not complete. Many plant-juices and other vegetable products are also very active; and it it is extremely probable that many pure organic chemicals other than those listed will also produce the Russell Effect.

However, some of these substances are active only under certain conditions. For instance, the metals are most active when they are bright and polished. When they have become tarnished and covered with a layer of oxide they are not so active. Paints and varnishes, that is to say drying oils, are only really active when they are wet. When they are thoroughly dry, they are not particularly harmful. And papers can be prepared which are almost inactive. The black paper packed in between cut-films is an illustration.

The length of exposure to these substances which is required to produce decided fog varies greatly. But under conditions favorable to the fogging action, the exposure needed is a matter of hours, at most of days. The duration of the exposure needed to give a certain degree of fog is influenced by many factors, the most important of which are temperature, nature and condition of the fogging substance, previous exposure of the fogging substance to light, and the quantities of oxygen and water vapor present.

Temperature is important. As the temperature at which the plate is exposed to the fogging substance is raised, the amount of fog is usually increased, sometimes enormously. This is particularly true when the active substances are vegetable products. Thus, sandalwood is more than eight times as active a fogging agent at 45° C. (113° F.) as at room temperature.[5] This increased activity may be due largely to increase in vapor pressure of violatile constituents. But

TIRED OUT J. HERBERT SAUNDERS

HONORABLE MENTION—OUTDOOR-GENRES

whatever the cause, the effect of heat is very striking in some instances.

Another factor which has a strong influence on the magnitude of the Russell Effect is previous exposure of the active substance to light. In many cases, light accelerates the reaction which results in the formation of hydrogen-peroxide, and the hydrogen-peroxide is stored by the substance, or the production of peroxide persists after the action of the light has been stopped. Thus, if an active piece of wood or paper be exposed to sunlight, and then in the dark placed in contact with a photographic plate, the fog produced is much more pronounced than if the paper or wood had not been exposed to the light.

Screens placed between the fog-producing substance and the photographic plate may or may not prevent fogging, according to the nature of the screen. Porous substances such as paper, cardboard, vegetable-parchment, gold-beater's skin do not prevent fog when placed over the plate. Neither will celluloid, sheet gelatin, unless very dry, or collodion. On the other hand, glass, mica, and other minerals will protect the plate perfectly.

An interesting characteristic of the Russell Effect is that the fogging tendency travels downward rather than up. That is to say, if a photographic plate is placed a certain distance above a sheet of fog-producing material, and another plate is placed the same distance below the sheet, the emulsions being turned toward each other, the lower plate will be fogged most. This is no doubt due to the fact that hydrogen-peroxide vapor is heavier than air, and, therefore, it sinks rather than rises.

Summarising the significant facts, we find that:

(1) A great variety of substances when placed near, or in contact with, a photographic plate have the power to cause the plate to fog. The presence of oxygen, air, or previous exposure of the fog-producing substance to air or oxygen, is necessary for this action on the plate.

(2) Heat accelerates the fogging action.

(3) Previous exposure of the fog-producing substance to light in the presence of air intensifies the fogging action.

(4) Screens of paper, cardboard, parchment, gold beater's skin, collodion, gelatin, and celluloid will not protect the plate.

(5) Screens of glass, mica, other minerals, and some metals, such as copper, will protect the plate.

(6) A plate placed below the fog-producing material will be more strongly affected than a plate placed above it.

Now, what practical significance do these facts have for photographers? They should have a good deal; for, surprising as it may seem, the Russell Effect is met with not infrequently, certainly much oftener than it is recognised in ordinary photographic work. We all know about plate-holder fogging of plates and films. But the Russell Effect is continually showing itself in all sorts of unexpected forms. In these cases, the result is usually ascribed to some kind of unexplained freak of nature.

Then, sometimes, the Russell Effect leads to altogether erroneous results. There have been several cases, even in eminently respectable scientific literature. A recent one has already been mentioned at the beginning of the paper.

Of course, the average photographer is not immediately interested in the detection of invisible radiations. The fogging of plates and films in their holders is much more to the point. The ordinary fog produced by leaving the plate in the holder too long is well enough known. Yet, there are peculiar instances of this. If a common double wooden holder is allowed to lie flat on one side until fog is produced, the plate in the top division of the holder is most likely to be fogged, if it is an ordinary plate. With screen plates, which are glass-side out in the holder, the bottom plate is probably more in danger. Of course, there are other factors involved, and one cannot lay this rule down as an infallible law. Yet, in the few cases in which I have carefully observed fogging in a holder stored flat on a side, it has always been the top one of the pair of plates in the holder which has shown fog, and the lower plate has been clear.

One is sometimes tempted to place the emulsion side of undeveloped plates in contact with foreign substances. If this is done, the substance should be chosen with discretion. The paper with which ordinary plates and photographic papers are packed will fog if placed directly in contact with the emulsion. Many other things will fog, too. I once had occasion to make a reversed negative in the camera of a rather contrasty subject. As the dividing partition in the plateholder was shiny, I placed a piece of black velvet against the emulsion, the plate being reversed in the holder. Though the plate was left in the holder only a day or so, at most, it showed decided fog on development.

Another thing to be avoided is bright light. This should be done not so much because sunlight can, as is generally believed, penetrate the plateholder slides, or the cardboard plate boxes, but because—which is probably more important—the hydrogen-peroxide produced by sunlight can penetrate into the holders and boxes very readily and fog the plates. Moreover, the heating produced by sunlight makes matters worse.

References

[1] I. N. Kugelmass and I. McQuarrie, *Science*, *60*, 272 (1924).

[2] I. N. Kugelmass and I. McQuarrie, *Science*, *62*, 87 (1925).

[3] Moser, *Pogg. Ann.*, *56*, 811 (1842).

[4] W. J. Russell, *Proc. Roy. Soc.* (*London*): *61*, 424 (1897); *63*, 102 (1898); *64*, 409 (1899); *78B*, 385 (1906); *80B*, 376 (1908).

[5] G. L. Keenan, *Chem. Reviews*, *3*, 106 (1926). (This article contains a good bibliography.)

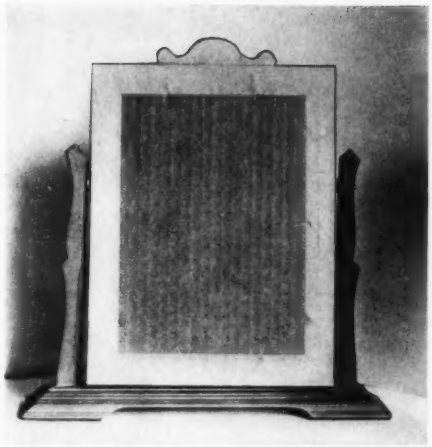
Helpful Photographic Hints

ROY L. CLINE

FRAMING pictures is a subject of immediate interest to the camerist. The amateur who can successfully make good portraits soon finds that his income is considerably increased by enlarging and framing them. Swing frames and wall frames of all sizes and prices can be purchased from the stock house, and quite a respectable business of this kind can be worked up among friends and acquaintances.

We will not cover all of the operations of framing in this article as almost everyone knows how to frame a picture. What we desire to mention is the backing used and method of finishing the job. The backing we use is simply the corrugated fiber-board that is wrapped around the frames for mailing. It is cut the desired size and fastened into place by small wire-brads. Now comes the time saver. Instead of trimming to size and pasting a sheet of paper over the back, we simply take gummed paper-tape and paste along the four edges of the frame and the job is completed. This is much easier and faster than the old way and makes as good or better looking job.

The picture shows the back of a swing frame



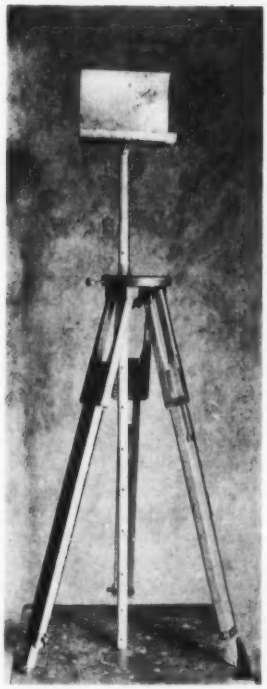
A SWING FRAME ROY L. CLINE

finished in this manner. The gummed paper-tape is inexpensive; and, if several pictures are framed at one time, the shortness of the work as compared with the old way is so noticeable that it is doubtful whether the other method will be used again after once using this. The fiber-back makes a very good finish, and as nearly everyone pastes cretonne or some fancy material over the back of a picture, it makes little difference whether the back is fiber or covered with paper.

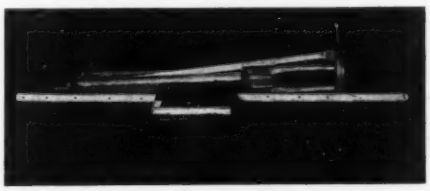
A Safe Flash-Lamp

Photographers are often bothered and run risks in setting off large amounts of powder with hand flash-lamps. To overcome these troubles, the lamp illustrated was made from an old tripod, a round stick and a flat tin-box. A hole was bored in the top of the tripod. The stick slides through this hole, being held in place by a nail which goes through the side of the tripod and into a hole bored in the stick. These holes in the stick are bored every two or three inches so that the height can be regulated. A small bolt in the bottom of the pan screws into a nut soldered to the ferrule around the top of the stick. The photographs show the outfit set up and taken down.

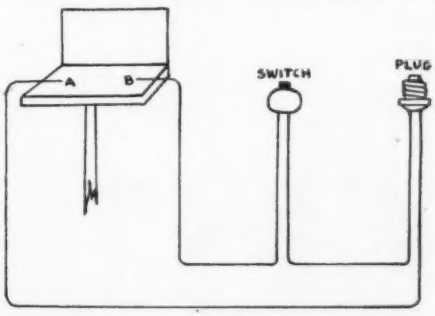
The flash is set up electrically. The diagram shows the wiring-plan of the circuit. About fifty feet of lamp-cord, a push-button switch and an attachment plug are all the equipment needed. The ends of the wire extend over each



SAFE FLASH-LAMP ROY L. CLINE



FLASHLAMP DISSEMBLED ROY L. CLINE



FUSE BETWEEN A AND B.

DIAGRAM OF WIRING ROY L. CLINE

side of the pan and they are connected with a short piece of one ampere fuse wire. The powder is poured over the fuse wire and when the button is pressed the fuse burns out, setting off the powder. The wires should be bent so that both ends do not touch the metal pan as this would cause a short circuit instead of blowing the fuse.

A light of this kind is under control of the operator who can confine his attention to the camera and simply press the button when everything is ready. An outfit of this kind is especially valuable to industrial photographers.

A Reflecting-Screen

There are times when a reflecting-screen is a necessity. It may be that we need it to make a portrait, we may be photographing an object in getting out a commercial order or something of that kind. A strong side light calls for a reflector to even up the light on the shadow side of the face or object.

The amateur may take a tip from the "movie" people and use a reflecting-screen painted with aluminum paint or silver-bronze. This can be mixed by buying the silver-bronze powder and mixing with banana oil.

The pictures accompanying this article show front and back view of a home-made screen that is hinged in the center with a cloth hinge and closes up like a book so that it may be more easily carried. This screen was made of corrugated fiber-board used for packing articles to be shipped by parcel post. In fact, it cost nothing as it was made from a box of this kind that had been received through the mail. The edges were bound with gummed paper tape used in sealing packages. The face was given two coats of silver-bronze paint. When folded, the painted side is in so that it is protected and kept clean. That's all there is to it—anyone can make it and it can be made any size to fit the needs of the individual using it. The difference in the reflection cast by the screen can be seen by comparing the front view, Figure 1 and back view, Figure 2.

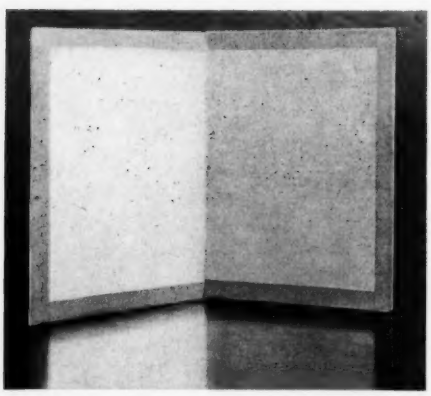


FIGURE 1 ROY L. CLINE

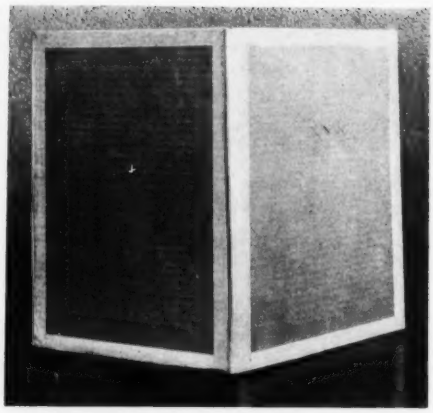


FIGURE 2 ROY L. CLINE

Straightening Prints

After spending an evening carefully finishing a batch of prints, the amateur lays them out to dry. They look well when laid out but in the morning they present an entirely different appearance. If it is during the cold season, the dry heat usually found in most homes has caused the prints to curl and buckle so that no matter how good the picture is, it lacks that professional look belonging to a perfectly flat print. Double-weight paper is especially bad about curling when drying. It simply ruins a choice enlargement to

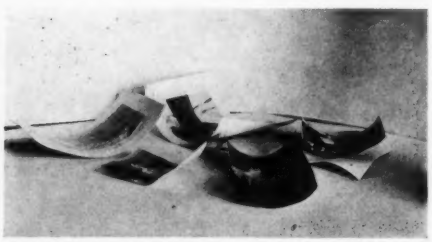


FIGURE 3 ROY L. CLINE

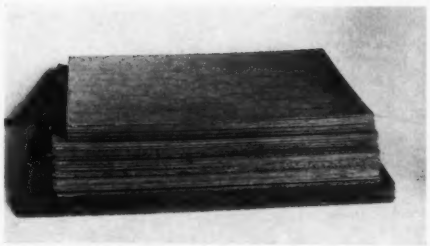


FIGURE 4 ROY L. CLINE

have it all curled and bulging, and if it is a print you desire to sell or an order to be finished for a customer, how do you feel about handing out a print of this kind? Figure 3 shows the "curly" effect usually found the next morning. These prints were dried face down on a cheese-cloth stretcher; but while that method is excellent for drying, it does not prevent curling.

A very satisfactory way of flattening the dried prints can be used by every amateur and at very little expense. It is the method you will see used in any studio you walk into—and the method is one hundred per cent. efficient.

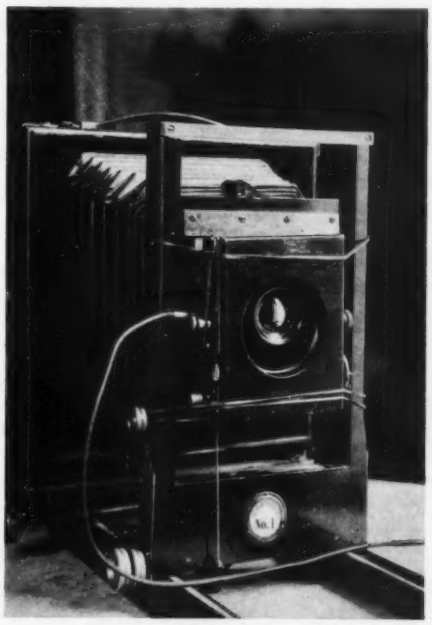
Simply go to the book-binders and get some heavy marble board cut a little larger than the prints or enlargements that you usually work with. Figure 4 shows a pile of these boards. The boards shown are large enough to use with 8 x 10 prints or smaller. The dry curled prints are moistened on the back leaving the face dry and placed between two of these boards. More prints are placed on top of these and another board added until you have the pile as high as you care to build it. Several prints of smaller size can be placed between two of the boards if you are not working with the large sizes. After the pile is completed, place two or three heavy books on top and leave until prints are perfectly dry. They will then come out flat and stay flat. A little experience will show how much the backs of the prints should be moistened. No harm will be done if they are made too moist, it will just take them that much longer to dry. This method is inexpensive and is within the reach of every amateur. It is the method used by nearly all studios as their prints must be flat before going into the folders.

We know from experience that the amateur reads a hint of this kind and thinks "some day I will try that"; but he puts it off and goes along the same old way, but still not entirely satisfied. Try this, and we know you will be more satisfied with your finished work.

Using Curtain-Type Shutter with Wide Angle Lens

Quite frequently the purchaser of a wide-angle lens decides that the lens in barrel is sufficient for his needs and that the extra expense of a shutter can be avoided by using the lens-cap. This is all very well for most of the interior work that is done, but for out-door work it is not so satisfactory. Instantaneous exposures are necessary, at times, and a shutter is a necessity.

Having a wide-angle lens without shutter, and having a certain-type shutter for use with other



SHUTTER HELD IN PLACE ROY L. CLINE

lenses, the thought occurred to us that by fastening this shutter against the front of the lens board it would serve very well when using the wide-angle lens. Accordingly, the plan was worked out with very little trouble by simply holding the shutter in place with two rubber bands. It is quickly adjusted and quickly removed. In order to make the curtain of the shutter clear the front of the lens, a piece of ⅛ inch binder-board was glued to the back of the shutter-box and a hole cut through the binder-board, the size of the hole in the shutter. The picture shows shutter held in place, ready for use. The arrangement is very satisfactory.

REVOLVING ICE-ISLAND MARY E. ARCHER

Photographing Nature's Pranks

MARY E. ARCHER

THE Piseataquis River, which flows through the progressive town of Dover-Foxcroft, Me., recently produced a natural wonder which attracted the attention of all passers, and became the subject of much wondering comment.

Early in the season, when winter proclaimed its arrival by the usual zero weather, a bit of foam collected at a certain point in the stream where an eddy caught and held it and, day after day, whirled it about, adding all the while to its size, until a circular piece of ice appeared, like a snowy wedding cake, on the dark background of the current.

People marveled at its perfect circular shape and constant revolutions, and cameras began to make record of the peculiar phenomenon. I, too, was early upon the scene, recognising this as an opportunity to obtain a very unusual and interesting picture.

From a small cake it grew, as the weeks went by, to a beautiful sphere about thirty feet in diameter; and interest increased until camera, brush, and pen had exhausted each its utmost ingenuity to outdo the others in portraying this wonderful freak of nature.

Sun and wind and current played about the beautiful ice island for many weeks until finally, the thaws of January caused it to break up and disappear; leaving only the dark flowing river where erstwhile its fanciful form had been.

[We thank Mrs. Archer for this interesting and instructive example of how the camera may be utilised to advantage. Many equally good pictures are lost through lack of initiative on the part of camera-owners. No matter what the time of year may be, our readers should be ready. There's a thrill in photography for those who want it, and pleasure for all in good photography. Very often things will happen spontaneously, such as an impromptu reception to a prominent citizen, the celebration of a football victory or a political parade. Not always do these subjects merit a permanent record; but it is well to be prepared for the unexpected. Then, too, fires, floods, and tornadoes supply material of importance for record and press purposes, although the sad tale such pictures tell is not a very attractive inducement for the amateur photographer. The point is to so train oneself that there will be no hesitancy in selecting the subject-material which will be of news, scientific, or personal value. The ability to pick pictorial subjects from commonplace material is a matter of self-training, supplemented by thorough reading of textbooks on composition and technique. It is well worth the time.—EDITOR.]

Photography in School and College

ARTHUR L. MARBLE

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Chapter VI—Fine Art and Photography

PHOTOGRAPHY is but one plant in the vast garden of human knowledge. It is, however, a very exceptional specimen. The father of photography is Science; the mother, Art. Being the offspring of these progenitors, photography has inherited a distinguished set of relatives. From the paternal side it derives kinship with such great relations as Chemistry, Mathematics, and Physics, all of which have made generous contributions to the welfare of the infant. On the maternal side such names as Painting, Sculpture, Architecture, and Lesser Arts appear among the list of kinsmen. Literature is not an official member of the household but is so much in harmony with the ideals of the Fine Arts that people sometimes call it a member of the family.

The two parents, Science and Art, differ greatly in temperament and in the qualities they have given to their offspring, photography. Science descended from *Fact*. Art is the child of *Feeling*. From Science, photography derives the power to do; from Art, photography derives culture and progression. Naturally, the Art and Science of the camera is proud of its inheritance from both parents. Photography has, of course, been given its father's appellation, and in the name of Science much of its work has been accomplished. There are folks, sad to say, who are either unaware of the fact that photography had a mother or have forgotten her name. It is obviously unfair to give the father the lion's share of the credit, so we shall in this article speak of the mother, Fine Arts, and try to ascertain what the child has received from this distinguished family; and we shall endeavor to see what the healthy youngster has done, is doing, or can do to assist the work of its mother and members of the family.

There is a popular conception among students that in order to be an artist a person must be a painter; but any true definition of the term, will reveal the fallacy of the idea. *An artist is one who comprehends and feels beauty and can communicate it to other people.* We all pride ourselves on being practical; but there is something of the feeling and the idealism of the artist in all of us. In many it may lie dormant for a lifetime; and there are people who live and die without discovering their own capabilities for the creation or enjoyment of beauty. In others, the æsthetic sense is cultivated through contact with cultured people and with beautiful things and ideas until they are not only able to appreciate a work of art when they see it, but they can give expression to the beautiful within their own souls. These men become the artists, the painters, the poets, and the musicians. They rarely claim to instruct, and have as their primary purpose the giving of delight to the ear and eye of man. Some of the greatest lessons in the world come, nevertheless, through the avenues of the fine arts. Through them, the taste and aspirations of all mankind are elevated.

The fine arts are, after all, one in purpose. In the words of Emerson, "Away with your nonsense of oils and easels, of marble and chisels: except to open your eyes to the witchcraft of eternal art they are as hypocritical rubbish." In these words, art is greater than any single mode of expression. If with a camera an artist can express feelings and emotions, there is no doubt that photography is a fine art.

Every mode of art-expression has its own advantages and disadvantages, its weak points and its strong ones. Where is the painter whose hand has kept pace with his imagination; where the poet who could utter all the thoughts that arose in him?

> What hand and brain went ever paired?
> What heart alike conceived and dared?

Despite his handicap, the painter has created much that time has stamped as fine art. The great works have not come because the painters and sculptors lost themselves in despair at the shortcomings of their modes of expression, but because they have rejoiced in the possibilities of their medium. They did not essay that which is impossible for the brush and the chisel. Rather, these tools were glorified by thoughts and emotions that they could record.

This is the only way that art can be created with the camera as a tool. Here we have an instrument that by itself can do nothing. It works mostly in monochrome, and does not always record color to advantage; but is brilliant in its sense of line and of tone. Unless the lens is of sufficiently long focus it is treacherous in perspective.

Now, in the motion picture we have something new. It has accomplished what no other fine art has accomplished: caught life not only in form, but in action. In recording movement; it has given the camera a new expression of distance, of depth, and of perspective; for objects in motion at varying distances from the lens stand out and seem actually to be in different planes. It must be admitted that comparatively few photographers have realised the artistic capabilities of the camera. Most amateurs have had insufficient training in the use of their instruments; and as a result have worked too carelessly and hastily to make even beautiful photographs. And truly artistic work is rarely accomplished under pressure. Few people realise the actual capacity of the camera in the expression of feelings and emotions when it is *in the hands of an artist.* It has been charged that the camera is unfeeling and impersonal. That is true: it is unfeeling as a painter's brush is unfeeling; impersonal as a sculptor's chisel is impersonal. All worth-while works of art are created in the mind of the artist, and the tool he employs is secondary. Both the painter and the photographer are seeking to create beauty; the first adds line upon line and stroke to stroke until his work is completed; the second chooses from nature that which represents his ideal and expresses it, not as a draughtsman would copy it, but *by making the camera see as he sees.* The process of successful painting is one of synthesis or the building up step by step of a successful unit. Pictorial photography, on the other hand, chooses the unit from the mass and seeks to copy what is seen and felt by the artist.

Before anyone can hope to make photographs that are worthy of the name Fine Art, he must learn to make beautiful photographs: pictures that are technically correct and have been built on the major principles of art. When we shall have attained that ideal, we shall then find that through the camera a great variety of emotions and feelings may be expressed. Yet, while we are learning, it is well for us to remember that a beautiful picture is its own excuse for being, and is something of which to be proud. Let us certainly combine technique and art, idea and emotion as much as possible. But just as pleasing verse is justified irrespective of whether it be true poetry, so it is that a true and beautiful copy of nature is superior to an untrue impression of it.

The fine arts have made priceless contributions to the art of photography. Of these, none has done more than painting. From the masterpieces the would-be pictorialist learns invaluable lessons of composition, and gets some sympathy and feeling for the spirit that pervades the finest work. Architecture and sculpture have their own lessons to give as do the arts of decorating and landscape-gardening. As these fields offer some of the richest material the photographer has to draw upon, he can well afford to take advantage of the principles that underly all these arts. Before a photographer can portray to the best advantage a great building, a statue, an interior of a residence, a country-estate, or unaltered nature herself, it were well for him to know the feelings and motives of the architect, the sculptor, the interior decorator, and the landscape-gardener.

No photographer would neglect the rich contributions made by the vast field of literature. He who would portray human life and would make portraits that are truly works of art cannot afford to disregard a study of human nature. True enough, life itself is the great source-book for this knowledge; but it is literature that records life and the feelings and actions of mankind, so that one is better able to recognise essentials of character when he sees them. There are other relationships of equal importance. Literary masterpieces have furnished some of the very best material for motion-picture scenarios. As a sequel of the kinema and the rise of photography as a fine art, a new branch of literature will come forth: the literature of the scenario. The work of writing titles and subtitles has already become a separate field of endeavor. What the motion-picture drama stands in need of most at the present is a literary master who is also an artist. When a man arises who knows people and places and things, who knows the possibilities and limitations of the camera and can write effective drama, then we shall have the Shakespeare of the screen. Who can say that the people are not ready for such a genius?

Then there is, in the literary criticism of photography and the motion-pictures, a field that is as yet almost untouched. Not only will this make a new department of literature, but the work will do much for the elevation of photography as an art. Little, if any, criticism of photography in the broad sense that it includes the art-criticism of motion-pictures, has been written that will live as literature. The pathway is almost unbroken; consequently the opportunities are many. Literary criticisms of painting now number hundreds of choice volumes. The Ruskin of photography is yet to appear.

Perhaps one of the greatest future photographic realms of literature is that of photographic journalism. A short time ago, an art-authority wrote in all sincerity: "The author

" . . . AND THE WORLD LAUGHS WITH YOU" J. V. D. BUCHER
HONORABLE MENTION—MISCELLANEOUS

who can photograph is impossible". Within the last few years this statement has been disproved by the work of travelers, explorers, and scientists, who have supplemented their written material with photographs of their own making. The work of such men as Burton Holmes, Martin Johnson, and the Finleys is illustrative. If this production continues—and there is no reason that it should not increase with the years—there is little doubt that the best of this work will be preserved as literature.

If photography is and will be indebted to the fine arts for great advances, so also the fine arts are in a measure repaid by what photography has done and will do for them. The following is quoted from Henry Turner Bailey, the well-known art-authority:

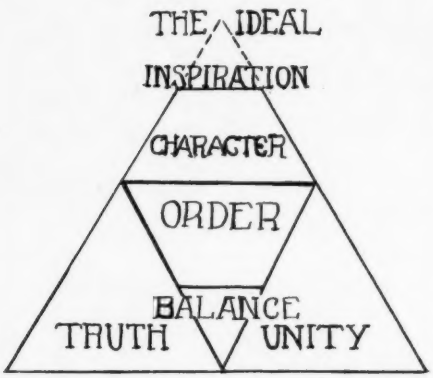
"If the printing-press brought about the democracy of learning, the camera is responsible for democratising pictorial art. The invention of the camera made posssible the numerous modern reproducing processes by means of which the masterpieces of the world, stored in foreign museums, palaces, and churches, and in private collections of aristocrats and other wealthy people, have been made available for everybody. The photographic processes are responsible also for the pictorial inundation of newspapers, magazines, books, advertising-matter, billboards, and movie screens."

After all, as the fine arts are one in purpose and in the pursuit of a common aim, the production and appreciation of beauty, they should work harmoniously together. Not only are they alike in purpose, but in the fundamental means they employ to effect the end in view.

It seems to the author that there are four major principles that, taken together, form the keystone of all the fine arts. No attempt will be made to name all the qualities of the fine arts. To do so would be manifestly impossible; but we may analyse briefly a few of the qualities that make for such great unity among the arts. Any list of underlying requirements of fine art ought to include *Truth*, *Order*, *Unity*, and *Character*, for out of these grow *Inspiration* and a *Vision of the Ideal*.

When John Keats wrote: "Beauty is truth, truth beauty", he no doubt would have the statement applied to art rather than science, for he was an artist himself. There can be little question that beauty is a quality or com-

bination of qualities that through its adaptation or fitness to purpose, or by its grace, makes an appeal to the ear or the eye. Pontius Pilate was not the first nor the last to ask, "What is truth?" We are told that truth in art means that which is genuine and sincere; that which either conforms strictly to nature, or is an honest expression of personal feelings and conviction. But such a definition needs explanation. Truth in art should be appropriate and fitting. A man may be perfectly sincere in making a copy of nature; but to make truth beautiful—the artist's aim—he must select and choose from the true that which is most fitting and harmonious. If the artist, therefore, is to interpret nature truthfully, as well as beautifully, he must take care that his point of view is not distorted. "All art", says Kipling, "is an effort to be sincere."



PYRAMID OF TRUE ART ARTHUR L. MARBLE

THE IDEAL

Character	Inspiration
	Originality
	Emotion
	Thought
Unity	Workmanship
	Integrity

Beauty (Grace or Fitness)

	Repetition
	Movement
Order	Rhythm
	Symmetry
	Balance (Repose)
Truth	(Sincerity)

Order in all art may be said to be based on *balance*. You will find it in one of Beethoven's sonatas, Bacon's essays or Millet's paintings. In his instructive sense of fitness, man looks for poise and steadiness in his art, just as he does in his life. A feeling for balance is essential in pictorial composition as it is in piloting an airplane.

Symmetry, or the pleasing arrangement of parts, is to the graphic arts what harmony is to music. *Rhythm* may be expressed in line and tone, in a painting or a photograph, as it may be in beat and cadence in poetry. Artists have noticed that "rhythm is found everywhere in nature: the beat of the heart, the ebb and flow of the sea, the alternation of day and night". In still photography, as in painting, movement may be expressed dynamically. Figures may appear in attitude or arrangement to be actually moving. This is but one way of appealing to the imagination. Pictorially, repetition may be a valuable aid to unity, and by repeating lines, tones or masses, much may be done to bring about an ordered and easily understood whole.

Unity may be called the hand-maiden of order. The constituent parts must co-operate to produce a single definite impression. All things ought to become one in purpose, feeling, or in mood, and hence satisfy with a sense of completeness. Unity implies that the artist includes everything essential to the understanding of his message, and omits anything that may create misunderstanding as to the main purpose.

Character in fine art consists chiefly of the personal qualities that, combining, make the work individualistic and distinct from all other. It is the character of Corot's landscape-painting that makes it instantly distinguishable from the work of Whistler. Among the essential characteristics I would name *Integrity*, which is nothing more nor less than the personal manifestation of truth. The artist must not only base his work on the pillar of veracity, but should absorb the advice of Polonius:

> "This above all, to thine own self be true;
> And it must follow as the night the day
> Thou canst not then be false to any man."

Workmanship is the outward fruition of all the other personal qualities. Call it craftsmanship if you will. In it are included such things as technical skill and the ability to use tools. Good workmanship implies that the artist knows the possibilities and limitations of his medium.

It is said that there is nothing new under the sun; but the fact remains that every great

PALS — W. A. PHILLIS

HONORABLE MENTION—MISCELLANEOUS

artist gives to the world something that is different from that to which it is accustomed. He had his own way of viewing things; he finds beauty lurking where no one before had suspected it to be. He has a style of expression that is peculiar to himself; and hence the man is marked off as different from the mass of mankind.

Originality is not, however, a quality that may be tacked on from the outside. Rather, it is bound up like beauty itself, with all the other qualities.

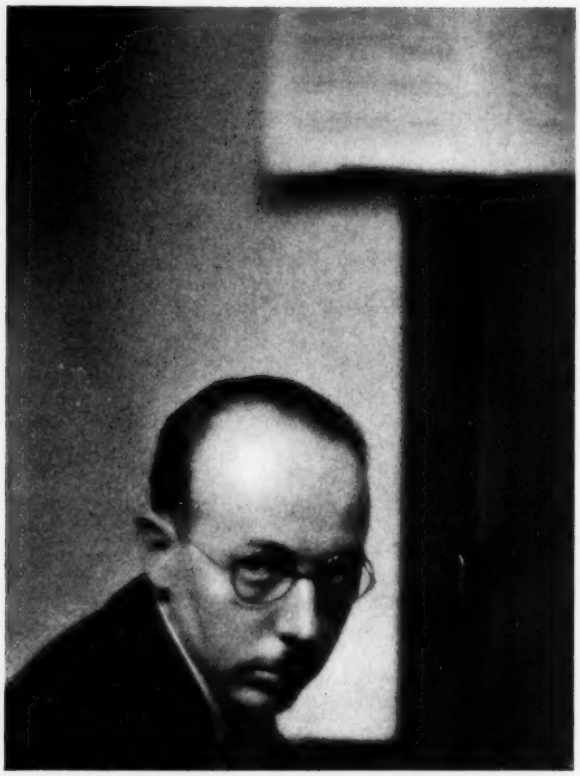
Great works of art, indeed, may be the product of emotion, feeling, imagination, and inspiration; but all of these things grow out of *thought*. The highest reaches of music and of poetry were first created in the mind before they came to full bloom in the expression. To make a plan of a work before executing it may seem a prosaic process; but who would say that inspiration does not come more quickly to a diligent mind than to one that "waits for an idea"?

"Art", someone has said, "is nature seen through a temperament." Without *Emotion* there could be no fine art worthy of the name. It is manifestly impossible for the artist to cause emotions and feelings to arise in other people without first having been impressed with the sublimity of a scene, with the hopefulness or despair of a situation, or such moods as cheerfulness and gloom in nature and in man.

There is something in the arts that makes men dissatisfied with passable work and mediocre lives, and gives them the aspiration to accomplish greater things. It is the constant *search for the ideal.*

In his excellent treatise on "What Literature Can Do for Me", C. Alfonso Smith calls our attention to incidents in the lives of two artists who, sorry to relate, had lost their vision of the ideal and consequently had ceased reaching for higher things.

When the famous sculptor, Thorvaldsen, unveiled his statue of Jesus Christ, witnesses of the event were astounded to hear him mourn-



PORTRAIT—PAUL WHITE ALEXANDER LEVENTON
HONORABLE MENTION—MISCELLANEOUS

fully say, "My genius is decaying!" On being questioned we are told that he replied, "This statue is the first of my works that I have been completely satisfied with. Until now, my ideal has been far above my ability to execute. But it is no longer. I shall never create a great work of art again."

Andrea del Sarto, a great painter described by Robert Browning, had perfected his methods to the point where it was no longer necessary to plan carefully or even draw preliminary sketches. Naturally, he was envied by his professional friends; but he was sorry for himself and wished that he could paint as did his fellow artists. Their aspirations and ideals rose far above the powers of accomplishment, with the result that their painting constantly improved. In Browning's poem, Andrea says:

"Oh, but a man's reach should exceed his grasp,
Or what's a heaven for?"

As students of photography we must erect our own ideals: and when these ideals have been attained, they must be discarded, and new and higher ones must be substituted in their place. Let us, then, through the science and art of photography, make all the world our domain. Let us draw power and pleasure and inspiration from the entire field of human knowledge. Photography will take us to the sciences and the useful arts which will assist us to master the technique of camera-operation, without which we cannot hope to accomplish anything. It will take us to literature and the fine arts, so rich in ideas and things of culture, progress, and beauty. Then by a matchless combination of education through fact and inspiration we shall have our eyes opened to new glories in photography. And we shall live more and serve better.

(*To be continued*)

The Matter of Following Directions!

JAMES P. MARSHALL

IT was a happy day in this amateur's life when he became the possessor of a film-tank. Being already somewhat familiar with its manner of operation, he hastily skimmed the direction-booklet and proceeded to run through an exposed film. The result, fortunately, was all that he had hoped for, the negatives coming out bright and clear. And thus he became an experienced (?) tank-operator.

Time passed! Vacation came and went; and, after its passing, the amateur found that he had several films to develop. In one evening he put them through. The first strip was a delight. The second strip met with an accident. The apron was still wet when that second strip was wound. True, the amateur dimly remembered that the booklet had said something about drying the apron; but, perhaps, it didn't matter. That second film somehow managed to stick itself to the apron in several places, each place so stuck marking an area of non-development on the finished strip.

The accident set the amateur to thinking. Surely there must be some way to prevent a recurrence of the damage. The third film entered the box, and the wet apron again was wound around it. When the spool was immersed in the tank, and the cover fastened in place, the amateur grasped the tank and shook it much after the fashion of the gentleman behind the neighboring soda-fountain. Each time he reversed the tank, he repeated the shaking, and anxiously he surveyed the film as he stripped it from the apron. He had discovered the secret! The vacation-film was safely through that mysterious tank. The other films followed in rapid succession, each one bringing more joy to the finisher.

Vacation had stirred to life the latent longing for another camera. In a pawn-shop near by reposed a 3-A Kodak special. Time after time the amateur had passed that shop-window and yearned to buy that camera. Now came resolution; the camera became his.

On the first Sunday following the purchase, he snapped a six-exposure film, and rushed back to develop it. Remembering the episode of the vacation-films, he wound his strip into the apron, decided not to put an elastic around it, and dropped the apron into the tank. There followed a period of vigorous shakings, interspersed with rests. When the film again came to light, it looked good on first inspection. Truly, he must have discovered the secret of the tank!

Alas! When the film was more carefully inspected, several long, thin streaks showed through, which streaks when printed became long, black blurs running across the pictures. The camera was hauled out for inspection. After much squinting through the back, with the lens close to an electric bulb, the amateur decided that the shutter leaked. At first, he had thought it to be only a reflection on the lens; but the longer he looked, the more convinced he became that he saw a thin streak of light where the shutter-leaves came together. Of course, light striking the film *should* make a dark streak instead of a light one; but somewhere he had read of a process of reversal when excessive over-exposure took place. The offending camera was shipped to the factory for repairs.

Another Sunday came, and with it a picnic-party. The camera had not come back; but an obliging dealer lent the amateur a duplicate of his own. When the film went through the tank that night the apron was loose, and the tank was shaken—and out came the negatives streaked, badly streaked, even worse than before!

Realisation dawned at last! It was the tank, the "blankety blanked" tank that was responsible for all these woes; and, in the heat of the moment, the amateur vowed he would never again trust his precious films to such a contrivance.

Another period passed. The amateur made exposures, and developed them in the darkroom, while the tank rested quietly beneath an increasing coat of dust—then came the dawn of reason.

The photographic magazines spoke so often of the tank and its surety of results. Other amateurs praised its worth. Surely it must have a greater reliability than he had discovered. Could it be—*could* it be—himself?

With the direction-booklet before him the amateur made one more attempt. Each line he read carefully, and each direction he followed to the letter, and a beautiful set of negatives was his reward. Again and again he repeated his work with subsequent films, with the same results. The directions were made to be followed, carefully written by the makers who had long before been through the very same trials that had so recently beset the amateur.

Up on the shelf a set of trays now rests peaceably beside a ruby lantern. Below them stands the film-tank winding-box, resplendent in a new coat of varnish; and, in the heart of the amateur, there is happiness, for, at last, the tank has come into its own.

TREES OF LOMBARDY
JOHN SKARA
HONORABLE MENTION—MISCELLANEOUS

EDITORIAL

Groups

MANY years ago, when pictorial-composition had not developed into the fine art that it is today, professional workers considered it more difficult to make a satisfactory portrait than a large group. Today, the case seems to be reversed. In the olden days (we mean the early seventies) there were comparatively few master-portraitists—Rocher, Gutekunst, Landy, Sarony are names that glorified photographic-portraiture, and which are still held in high esteem by the photographers who profited by their exemplary work. One need only inspect the portrait-exhibits that constitute a prominent feature of an annual convention of the Photographers' Association of America, to be convinced of the high artistic standard of present-day portraiture. On the other hand, one regrets that this cannot be said of the manner in which groups of persons are usually arranged. Not enough thought seems to have been bestowed on such an undertaking, as one beholds a group of judges of the Supreme Court, for instance, or members of the Governor's Council, the Board of Trade, the President's Cabinet, or any other important body.

In looking through past issues of PHOTO-ERA MAGAZINE, the reader cannot fail to be impressed with the paucity of group-photographs, unless they happen to be illustrations of a special group-competition and obviously represent a distinct purpose—like the advertisers' committee that appeared in the January issue, 1927. These are marked by careful and generally artistic arrangement in posing. In our search through back-numbers for group-photographs, we were not a little surprised to discover that the regulation-photographs of the Executive Board of the Photographers' Association of America were among the worst. Consider, for instance, the one of the year 1917; here are shown six of the foremost portrait-photographers of the country; viz., Manley Tyree, president (deceased), seated behind a small square table, directly in the middle of the picture-space, an absolute profile gazing intently at the beautiful face of Pearl Grace Loehr. Directly behind Mr. Tyree, in the same row, is seated Mrs. Sara F. T. Price, another prominent woman-photographer, her back turned toward Mr. Tyree. She is facing Secretary Hoffman, who is seated with stolid indifference at the extreme left and looking toward the extreme right, where stands Mr. Will H. Towles, apparently listening to the imaginary conversation. In the back row stands Homer T. Harden, president of the National Photographers' Association, leaning over and listening to bits of the conversation between Mr. Tyree and beautiful Miss Loehr. At Mr. Harden's right is seen standing the tall figure of L. A. Dozer, who seems totally unconcerned with the entire proceeding. It would be difficult to imagine a more aimlessly and inanely composed group, leaving literally nothing to the observer's imagination.

When it is possible to make an outdoor-photograph, and there are available natural resources, such as benches or comfortable grass-plots, a pleasingly arranged group is possible; only, care should be exercised by the photographer in placing the camera at a sufficient height from the ground. It is easy to imagine the ludicrous effect that can be produced when the camera is placed too near the ground. The perspective produced is such as would move even the Sphynx to tears. It would not be difficult to find a suitable outdoor site with an appropriate setting, provided that the party and the photographer would be willing to make the effort to assemble there. Nor is it obligatory that the group be made out of doors. Now that the evenings are long, and members of a camera-club are frequently assembled in large numbers at the club-rooms, it might be considered preferable to make a flashlight-group under such pleasant and comfortable auspices. The easiest thing in the world!

One of the most successful industrial photographers of our acquaintance, a pictorial artist-photographer of no little reputation, derives considerable revenue by obtaining commissions to photograph meetings of committees, corporations, and societies, and by suggesting the importance such photographs call forth. He needs only to suggest the making of a group-photograph to one of his customers who happens to be a prominent official of some kind, and the suggestion scarcely ever fails to elicit an order. As the resulting picture is usually of high technical merit, a goodly number of prints is generally the reward of his business-sagacity.

ADVANCED COMPETITION

Closing the last day of every month
Address all prints to PHOTO-ERA MAGAZINE, Advanced Competition
Wolfeboro, New Hampshire, U.S.A.

Prizes

First Prize: Value $10.00.
Second Prize: Value $5.00.
Third Prize: Value $3.00.

Honorable Mention: (*a*) Those who win an Honorable Mention Award and are *not regular subscribers* will receive PHOTO-ERA MAGAZINE for six months with the compliments of the publishers.

(*b*) Those who win an Honorable Mention Award and are *already subscribers, or have been subscribers,* will receive an Honorable Mention Certificate. Those who win ten of these certificates and send them to us to be recorded will receive a neat silver cup, suitably engraved. There is no time-limit. However, ten certificates must accompany all requests for the cup.

Prizes may be chosen by the winners, and will be awarded in photographic materials sold by any dealer or manufacturer who advertises in PHOTO-ERA MAGAZINE, or in books. If preferred, the winner of a first prize may have a solid silver cup, suitably engraved.

No Prize or Honorable Mention pictures are sold, exchanged or the halftone-plates sold without permission, in writing, from the maker of the print. Proceeds of all sales, *excepting halftones,* go to the maker of the picture.

All competition-pictures not returned are used to make up the PHOTO-ERA PICTURE EXHIBIT which is sent to schools, libraries, museums, camera clubs, and to responsible organisations for exhibition-purposes, *free of cost.*

Rules

1. This competition is free and open to photographers of ability and in good standing—amateur or professional.

2. Not more than two subjects may be entered, but they must represent, throughout, the personal, unaided work of competitors. Subjects which have appeared in other publications are not eligible, nor may duplicate prints be sold, or entered into competitions elsewhere, before PHOTO-ERA MAGAZINE awards are announced.

3. Prints on rough or linen-finish surface, and sepias, are not suitable for reproduction, and should be accompanied by smooth prints having the same gradations and detail. Prints may be mounted or unmounted.

4. Each print must bear the maker's name and address, the title of the picture, and the name and month of competition, and should be accompanied by a letter, *sent separately,* giving full particulars of date, light, plate or film, make, type and focus of lens, stop used, exposure, developer, and printing-process. Enclose return-postage. Data-blanks sent at request.

5. Prints receiving prizes or Honorable Mention become the property of PHOTO-ERA MAGAZINE, unless for special reasons. This does not prevent the photographer from disposing of other prints from such negatives *after* he shall have received official recognition.

Photo-Era Prize Cup

6. Unsuccessful prints will be returned only when return-postage at the rate of one cent for each two ounces is sent with data.

7. Prints should be carefully packed between two layers of cellular board so cut that the corrugations run at right-angles to each other.

8. Competitors who have won three first prizes within a twelvemonth become ineligible to compete for prizes in this competition for *one* year thereafter.

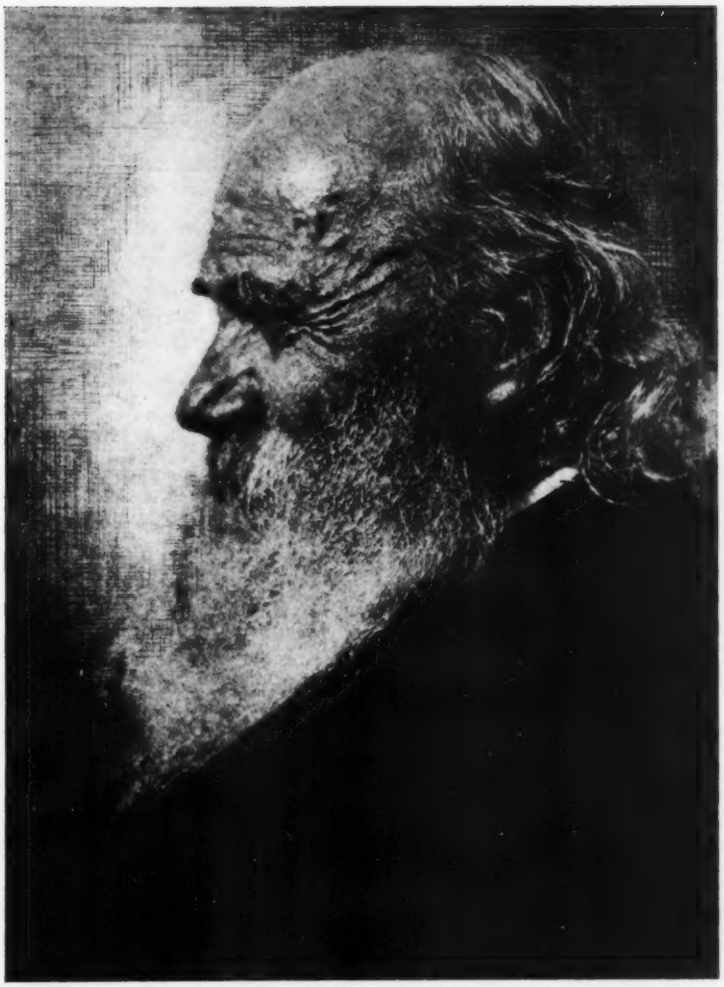
AWARDS—ADVANCED COMPETITION

Subject—MISCELLANEOUS

Closed October 31, 1927

First Prize . . . . . Dr. Max Thorek
Second Prize . . . . . Erwin J. Rebafka
Third Prize . . . . . Walter E. Owen

Honorable Mention: Albert A. Bailley; Mrs. C. A. Bonfils; J. V. D. Bucher; Mary Callaghan; Boris Chudadoff; Geo. W. French; William Gilchrist; Geo. M. Gerhard; Francis P. Griffiths; Haakon Haug; H. P. Herron; U. Stephen Johnson; Neil Kirby; Harold Lenfgren; Alexander Leventon; D. O. Macko; Anne H. Mellin; Robert R. Miller; Edward D. Mudge; A. J. Pandian; W. A. Phillis; Leonard Purin; J. H. Saunders; Mario Lucio Scacheri; Edna Seaton; John Skara; Henry Sill; C. H. Thomas; Horace Tyzack.



PROF. EDOARDO PERRONCITO (TOLSTOY'S DOUBLE)
DR. MAX THOREK
FIRST PRIZE—MISCELLANEOUS ADVANCED COMPETITION

Second Prize

ADVANCED
COMPETITION

MISCELLANEOUS

ARCHES

EDWIN J. REBAFKA

Third Prize

ADVANCED
COMPETITION

MISCELLANEOUS

KATHRYN

WALTER E. OWEN

SUBJECT FOR NEXT COMPETITION

ADVANCED WORKERS

Subjects for Competition—1928

"My Home." Closes January 31.
"Portraits." Closes February 28.
"Indoor-Genres." Closes March 31.
"Table-Top Photography." Closes April 30.
"Artificial Light Photographs." Closes May 31.
"Architectural Subjects." Closes June 30.
"Pictures of Children." Closes July 31.
"Landscapes." Closes August 31.
"Outdoor-Genres." Closes September 30.
"Animal Pictures." Closes October 31.
"Water-Scenes." Closes November 30.
"Vacation-Pictures." Closes December 31.

Portraits

At the special request of a considerable number of our readers, we are again having a competition devoted to portraits. Sometimes it is rather a difficult matter to point out the difference between a portrait and an indoor-genre. However, merely as a basis for a starting-point, let me suggest that, generally speaking, a portrait is considered to be a somewhat formal picture of the subject. As a rule, it is expected that sufficient time will be taken to obtain an artistic and pleasing pose. Furthermore, the exposure, lighting, and composition are expected to reflect the very best artistic and technical skill of the worker. Then, too, much depends upon the selection of printing-paper and its tone. In short, in a portrait, we look for the photographer's best effort. In a measure, he is master of the situation so far as lighting and composition are concerned. In the case of artificial illumination, he is not even dependent on daylight. He has freedom to release all the originality and artistry with which he may be endowed. It is a fair and exacting test of his photographic ability.

A. H. Beardsley.

SYNNOVE — HAAKON HAUG

EXAMPLE OF INTERPRETATION

BEGINNERS' COMPETITION

Closing the last day of every month
Address all prints to PHOTO-ERA MAGAZINE, Beginners' Competition
Wolfeboro, New Hampshire, U.S.A.

Prizes

First Prize: Value $7.50.
Second Prize: Value $3.50.

Honorable Mention: (*a*) Those who win an Honorable Mention Award and are *not regular subscribers* will receive PHOTO-ERA MAGAZINE for six months with the compliments of the publishers.

(*b*) Those who win an Honorable Mention Award and are *already subscribers, or have been subscribers*, will receive an Honorable Mention Certificate. Those who win ten of these certificates and send them to us to be recorded, will receive a neat silver-cup, suitably engraved. There is no time-limit. However, ten certificates must accompany all requests for the cup.

Prizes, chosen by the winner, will be awarded in photo-materials, sold by any dealer or manufacturer who advertises in PHOTO-ERA MAGAZINE, or in books.

No Prize or Honorable Mention pictures are sold, exchanged or the half-tone plates sold without permission, in writing, from the maker of the print. Proceeds of all sales, *excepting halftones*, go to the maker of the picture.

Rules

1. This competition is open only to beginners of limited experience with practical camera-activity, and whose work submitted here is without any practical help from friend or professional expert.

2. Workers are eligible so long as they have not won a first prize in this competition. Winners of the first prize automatically drop out permanently, but may enter prints in the Advanced Class at any time.

3. Prints eligible are contact-prints and enlargements up to and including 8 x 10 inches.

4. Prints representing no more than *two* different subjects, for any one competition, and printed in any medium except blue-print, may be entered. Prints may be mounted or unmounted, as desired. Subjects which have appeared in other publications are not eligible, nor may duplicate prints be sold, or entered in competitions elsewhere, before PHOTO-ERA MAGAZINE awards are announced.

5. Prints on rough or linen-finish surface, and sepias, are not suitable for reproduction, and should be accompanied by smooth prints having the same gradations.

6. Each print entered must bear the maker's name and address, the title of the picture, and the name and month of competition, and should be accompanied by a letter, *sent separately*, giving full particulars of date, light, plate or film, make, type and focus of lens, stop used, exposure, developer and printing-process. Enclose return-postage in this letter. Data-blanks sent at request.

7. Prints receiving prizes or Honorable Mention become the property of PHOTO-ERA MAGAZINE, unless for special reasons. This does not prevent the photographer from disposing of other prints from such negatives *after* he has received official recognition.

8. Unsuccessful prints will be returned only when return-postage at the rate of one cent for each two ounces or fraction is sent with data.

9. Prints should be carefully packed between two layers of cellular board so cut that the corrugations run at right angles to each other.

PHOTO-ERA MAGAZINE
The American Journal of Photography
Wolfeboro, New Hampshire, U. S. A.

THIS is to certify that an Award of PRIZE
is hereby given to the picture entitled

entered by

in the PHOTO-ERA MAGAZINE Monthly Competition

which closed 192

Editor

PRIZE-WINNERS' CERTIFICATE

PHOTO-ERA MAGAZINE
The American Journal of Photography
Wolfeboro, New Hampshire, U. S. A.

THIS is to certify that an Award of *Honorable Mention*
is hereby given to the picture entitled

entered by

in the PHOTO-ERA MAGAZINE Monthly Competition

which closed 192

Editor

HONORABLE MENTION CERTIFICATE

AWARDS—BEGINNERS' COMPETITION

Subject—MISCELLANEOUS

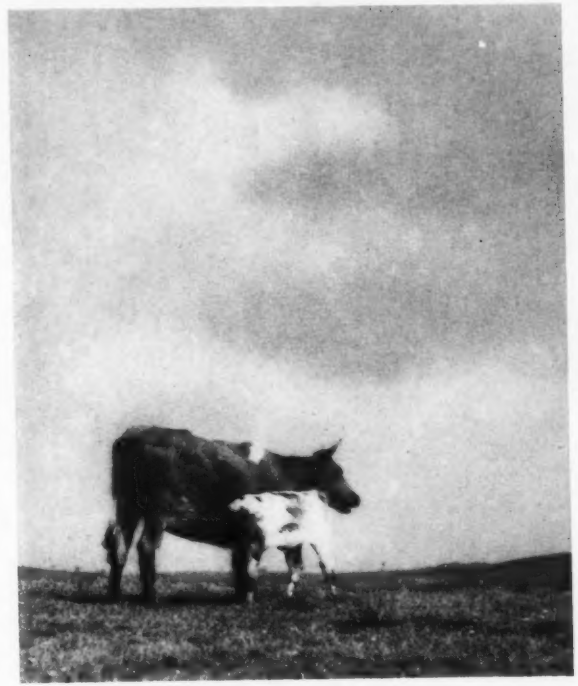
Closed October 31, 1927

First Prize . . . . . Alexander J. Krupy
Second Prize . . . . . W. A. Watson

Honorable Mention: Howard P. Crane; J. Daniels; Ewald Haase; John T. Matsuda; Helen Miller; Perry H. Moon; Werner Mueller; W. H. Smith.

ENTRANCE — ALEXANDER J. KRUPY

First Prize—BEGINNERS' COMPETITION



ALL ALONE — W. A. WATSON

Second Prize—BEGINNERS' COMPETITION

EXPOSURE-MAKERS' COMPETITION

Closing the last day of every month
Address all prints to PHOTO-ERA MAGAZINE, Exposure-Makers' Competition
Wolfeboro, New Hampshire, U.S.A.

Prizes

First Prize: Value $5.00.
Second Prize: Value $2.00.

Honorable Mention (*a*) Those who win an Honorable Mention Award and are *not regular subscribers* will receive PHOTO-ERA MAGAZINE for six months with the compliments of the publishers.

(*b*) Those who win an Honorable Mention Award and are *already subscribers, or have been subscribers,* will receive an Honorable Mention Certificate. Those who win ten of these certificates and send them to us to be recorded, will receive a neat silver-cup, suitably engraved. There is no time-limit. However, ten certificates must accompany all requests for the cup.

Prizes, chosen by the winner, will be awarded in photo-materials, sold by any dealer or manufacturer who advertises in PHOTO-ERA MAGAZINE, or in books.

No Prize or Honorable Mention pictures are sold, exchanged or the half-tone plates sold without permission, in writing, from the maker of the print. Proceeds of all sales, *excepting halftones,* go to the maker.

Entries are not eligible to Trophy Cup Contest.

Rules

1. This competition is open *only* to amateur photographers who for lack of time or equipment *cannot do their own photo-finishing.* Each contestant must compose his own picture and make the exposure without aid from friend or professional.

2. The name of the photo-finisher must appear on each print submitted. It will be printed under each prize-winning or Honorable Mention picture published.

3. Prints eligible are contact-prints and enlargements up to and including 8 x 10 inches.

4. Prints representing no more than *two* different subjects, for any one competition, and printed in any medium except blue-print, may be entered. Prints may be mounted or unmounted, as desired. Subjects which have appeared in other publications are not eligible, nor may duplicate prints be sold, or entered in competitions elsewhere, before PHOTO-ERA MAGAZINE awards are announced.

5. Prints on rough or linen-finish surface, and sepias, are not suitable for reproduction, and should be accompanied by smooth prints having the same gradations.

6. Each print entered must bear the maker's and photo-finisher's name and address, the title of the picture, and the name and month of competition, and should be accompanied by a letter, *sent separately,* giving full particulars of date, light, plate or film, make, type and focus of lens, stop used, and exposure. Enclose return-postage in this letter. Data-blanks sent at request.

7. Prints receiving prizes or Honorable Mention become the property of PHOTO-ERA MAGAZINE, unless for special reasons. This does not prevent the photographer from disposing of other prints from such negatives *after* he has received official recognition.

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PHOTO-ERA MAGAZINE
The American Journal of Photography
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THIS is to certify that an Award of .PRIZE
...is hereby given to the picture entitled

entered by

in the PHOTO-ERA MAGAZINE Monthly Competition

which closed .192.

Editor

PRIZE-WINNERS' CERTIFICATE

PHOTO-ERA MAGAZINE
The American Journal of Photography
Wolfeboro, New Hampshire, U. S. A.

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is hereby given to the picture entitled

entered by

in the PHOTO-ERA MAGAZINE Monthly Competition

which closed. 192

Editor

HONORABLE MENTION CERTIFICATE

AWARDS—EXPOSURE-MAKERS' COMPETITION

Subject—MISCELLANEOUS

Closed October 31, 1927

First Prize . . . . . E. B. Crosswhite
Second Prize . . . . . James G. Johnson

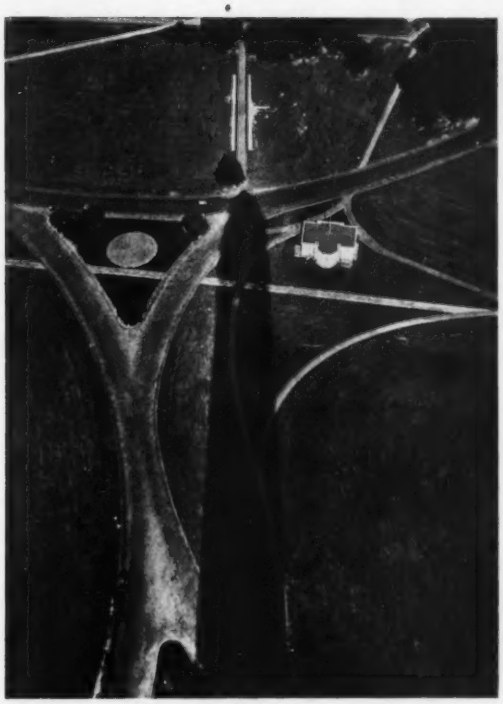
Honorable Mention: A. D. Anderson; Paul W. Kearney; C. E. Pellissier; Mrs. W. H. Smith; Lois Snelling.

First Prize

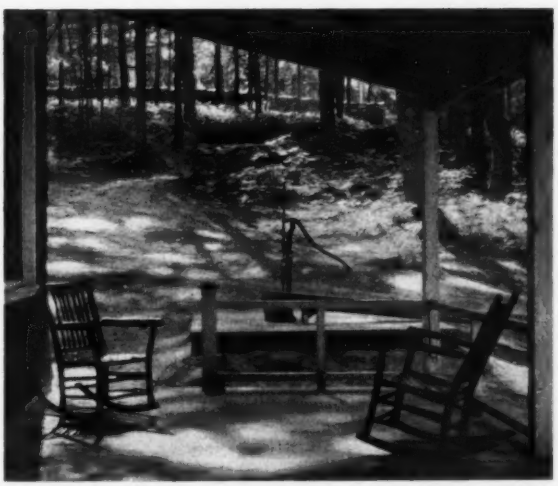
EXPOSURE-MAKERS'
COMPETITION

Photo-finished by

Eastman-Kodak Stores, Inc.
Los Angeles, Calif.



SHADOW OF WASHINGTON MONUMENT
E. B. CROSSWHITE



PORCH AND PUMP JAMES J. JOHNSON

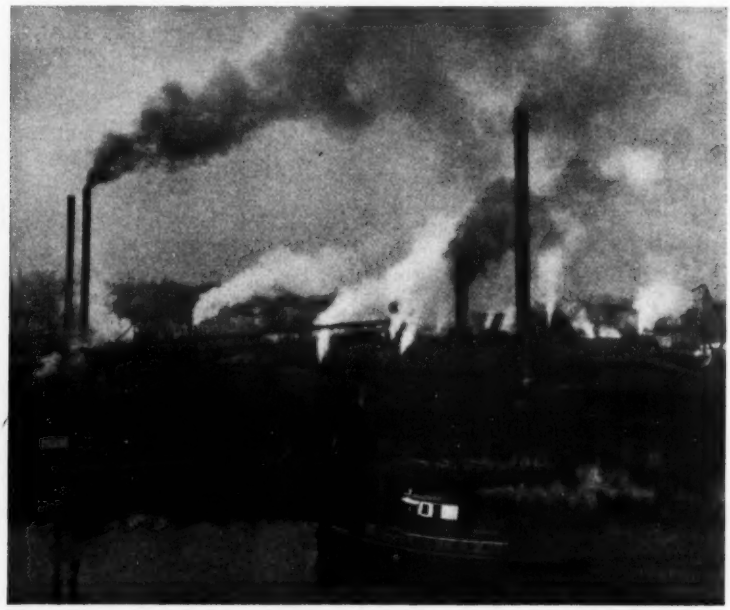
Second Prize

EXPOSURE-MAKERS'
COMPETITION

Photo-finished by

Willoughbys
New York City

OUR CONTRIBUTING CRITICS



RUSH-HOUR — O. KURANISHI

THE PICTURE CRITICISED THIS MONTH

Whoever sends the best criticism (not over 200 words) before the last day of the current month, will receive from us a three-month subscription to PHOTO-ERA MAGAZINE.

The winning criticism, in our opinion, is the first one printed below. Criticism should be helpful and courteous.

Seven Criteria for Critics

(1) Background and Sky. (2) Foreground and Figures. (3) Main Interest vs. *Distraction. (4) Gradations and Tone Values. (5) Lines and Masses. (6) Atmosphere and Interpretation, and (7) Photographic Technique.*

EVEN such a subject, intrinsically unlovely in itself, may form the basis of a pictorial photograph. Here are clearly evident perception and the attempt to record in this form a mental reaction. Moreover, by purely pictorial standards, it is done well. The ability to appreciate and to create the pictorial seems truly to be a racial characteristic of our island friends across the water to the west, and is the effect of study and practice for many generations.

Were this the writer's own picture, he would trim the bottom horizontally immediately above the white bill-board at the left. Then the dark area of yards and cars and mill-buildings forms a stable base for the strong and well-placed verticals of the stacks and the beautiful nuances of smoke and steam and somber sky. A longer exposure and very soft development would have helped to obtain more truthful differences of detail and tone in the foreground without sacrificing the tones of the sky. The title, "Full-Blast", with its further suggestion of the roaring fires beneath those stacks, seems more appropriate than the title, "Rush-Hour", which has through usage acquired the connotation of hurrying crowds in big cities at noon and closing time.

B. H. JACOBS.

IN "Rush-Hour", Mr. Kuranishi was evidently endeavoring to keep his own efforts in harmony with the idea expressed in the picture. He "rushed" his exposure entirely too much. This under-exposure resulted in a failure to bring out even a dim outline of the buildings, as well as the necessary reflections in the water. In fact, the water itself is hardly distinguishable from the land.

The picture seems also to be marred by the prominence of the large smoke-stack in the foreground. This gives an appearance of "all front and no back". No matter how hard you try to centralise your attention

AFTER THE STORM JAMES A. BELL

YOUR CRITICISM IS INVITED

on the more artistic, and properly situated, twin stacks, the eye always returns to the big one. Let's place it over in the rear of the twins, and about one-third of the distance between them and the next black smoke, and see the improvement.

The white and dark smoke form a pleasing contrast, but we wish the white were more strongly outlined against the sky, as is the black.

LOIS SNELLING.

"SNAPPY" is a hackneyed and much abused word, but it seems to fit here. One gets the impression of life and animation from this picture; and, undoubtedly, the author desired to convey that idea. He has used photographic media very well for that purpose. There is certainly nothing idyllic or restful about this scene, nothing far-away and dreamy. On the contrary, it is hustling, busy, and aggressive. This effect is produced by the clouds of steam and smoke which lead one to think of flaring fires under boilers and whirling wheels of machinery. A certain seriousness and dignity is lent to the scene by the tall stacks. These are correctly placed. No one of them is in the center of the picture, nor do they act as pillars to enclose a scene. Take a piece of white paper and lay it on the right side about three-quarters of an inch from the edge, and note the effect of a shut-in view.

The composition is excellent, though, personally, I think I should have toned down just a shade that flaring white on the tug in the foreground. Judging from the shadows, the picture must have been made about mid-day. If so, probably the human eye would have seen more distinctly the details of the river-bank, which here are very much obscured—due, I should say, to under-exposure, a rather serious defect which might have been avoided by the use of a meter. Another blemish is the curious optical effect caused by the leaning of the smokestacks toward the center, due perhaps to a defective—or inappropriate—lens.

E. L. C. MORSE.

WE have come to expect, from Japanese photographers, dainty, exotic subjects, and it is in the handling of such themes that they have achieved their prominent place in the world of artistic photography. No one would for a moment suspect that this picture was from a Japanese photographer. Mr. Kuranishi has departed from the realm in which he is most familiar, and it would have been better had he not strayed.

The upper half of the picture, "Rush-Hour", is beautiful, the sky, smoke, and steam being very well rendered, and the picture also having a pleasing softness.

Unfortunately, the foreground is so weak that it drags the entire picture down to the commonplace. Trim three-quarters of an inch from the bottom, and the result is much better, although this leaves at the bottom a strip of blackness that is utterly devoid of detail.

SAMUEL B. PRIEST.

"RUSH-HOUR" is a pleasing composition of mediocre subjects, which ordinarily are unpleasant visually by their smoky appearance and drab environment. The purpose of the view, no doubt, is to emphasise by the white steam the suggestion of industrial activity; this is skillfully done. The tug makes its presence known without undue aggression, and its absence would make a vast difference, although the white on the chart-house should be subdued. The different tones of steam and smoke, together with the leaden sky, make a nice artistic combination coupled with the middle distance, whose shadow is not devoid of detail. To be very critical, the reflections on the lower left should be removed; but, on account of the difficulties encountered in the circumstances, where there are so many different objects, their presence is unavoidable. There is a feeling of overcrowding which can be overlooked because the view contains an active suggestion.

JAMES A. BELL.

OUR ILLUSTRATIONS

WILFRED A. FRENCH, Ph.D.

[SPECIAL NOTE: *For still another month we are indebted to Mr. E. M. Washburn, pictorialist and technician, for his effective co-operation in preparing material for this department while Mr. French slowly, but steadily, regains his health and strength after his long illness.*—EDITOR.]

TRAVEL stories of photographic origin—or may we not say inspiration?—are of never-ending interest to the photographically minded. Therefore, it is a pleasing beginning to peruse and enjoy Martha Curry's article on the glories of Montana, so ably recorded with her faithful camera. It would seem to constitute one more strong argument in favor of "seeing America first". No regrets need be anticipated for those with the open mind and observant, appreciative eye. The Yellowstone River, as most of us know about it, is a rushing torrent confined between high walls in a bed of its own carving. Here, however, in "Across the Yellowstone", we are shown this sometime turbulent stream become placid and winsome, gently rambling amid smiling flower-embroidered meadows. The distant hills beyond remind us whence it came.

If you think the days of the cowboy are past, you are to be better informed by "The Riders of Gumbo Flats". The author's delightfully interesting description creates a flow of pleasant imaginings, and we ride, photograph, and enjoy with her, the land of open sky, sunshine, and flowers. The animated group of horsemen does credit to her quick discrimination and sure "trigger-finger ". One might imagine the white objects to be the bleaching bones of some unfortunate beast.

What a change, as we turn a leaf and find ourselves in a charming valley, backed with snow-tipped mountains! The picturesque "Homestead Cabin" at the bend of the road invites us to pause awhile and bask in the warm sunshine of this sheltered spot. A fine composition of well-balanced area of light and shade, full of color suggestion.

"Westward Ho!" We can well believe it, and wish we were aboard the little train, bound for scenes of sublimity and grandeur, promised by the great mountainous masses just beyond. Are we mistaken, or are those actually cattle on the tracks? If so they appear unaware, or without fear of danger. The poster-quality of this print is very marked. The author knew just when to shoot, and got the white steam against the darkest shadow, giving relief and perspective. This apparently simple little picture will repay much study.

More matter-of-fact is the picture of the sheep, "In the Shadow of the Ruby Mountains". To our Eastern eyes, the spectacle of grazing sheep and near-by snow is an unusual one. The ranges beyond evidently offer protection.

The white-faced "Herd of Herefords" suggest to us where our tenderloins and juicy roasts of beef are coming from at some future date. Cattle are always like this; wide-eyed and curious at first, but ready to bolt at the slightest alarm.

There are no definite data given in this story, although the casual mention of "my little Graflex" and the "exposure of a plate" give the necessary clue to the methods used by the author. The results bespeak her mastery of technique and artistic training.

William F. Ross's group of little prints on page 14 furnish ample proof that he is wide awake to his photographic opportunities. Other "live-wire" high-school boys may well find inspiration to follow up similar ideas. The introduction of living models in each case will make them of lasting interest. Critically speaking, they are a bit contrasty for our taste, but that slight defect is easily overcome in printing.

Roy L. Cline's hints, pages 20 to 23, are so well set forth by means of photographs that they are easily copied by almost anybody. The curtain-type shutter, over the wide-angle lens, is ingenious and novel.

It is an old saying that "Nature does everything"; yet who would ever expect to find her making a "merry-go-round" of a cake of ice? Nevertheless, here it is. Thoreau, keen observer and lover of nature that he was, would have delighted in such a phenomenon.

Following through PHOTO-ERA illustrations month by month, as the present writer has done for a number of years, and being privileged to review them on several occasions, as well as to serve on the jury of award, one is impressed with the consistently high average of good quality of the winning and leading prints in the various competitions. Indeed, it is necessary to submit work of super-quality, even to capture an honorable mention; and the margin between mention and prize-award is, oft-times, exceedingly narrow. Obviously, this contributes to average high quality and makes the competitions keenly interesting, both to participants and readers. The present number is embellished largely with prints from competitions, and it is a very valuable demonstration of the improvement in artistic and technical ability prevalent among camera devotees. Honorable-mention contestants of today become prize-winners of tomorrow and salon exhibitors of the future. Thus will the ranks of the pictorialists be kept intact and recruited with fresh blood.

Advanced Workers' Competition

THE "Miscellaneous" Competition has brought out such a large array of excellent prints that we group them all together under one heading, to serve as inspiration to all future and intending contenders. The first-prize award portrait of "Professor Perroncito", by Max Thorek (page 35), is strong in line and mass, and brings out with forcefulness the rugged lineaments of this patriarch—a kindly face and the head of a thinker. We feel it would be an honor as well as a pleasure to be his friend.

Data: Made with Graflex, 3¼ x 4¼, with B. & L. lens, 7½ inch-focus, at F/4.5, in 1/400 second, in July, at 3.30 P.M.; on Agfa film-pack; brilliant light. Elon-Pyro developer. Enlargement on Portrait Bromide E. Rough Luster.

Edwin J. Rebafka has taken unusual material for his second prize print and converted it into an interesting vista. The average camerist would have passed by "Arches" without a second thought as to its pictorial possibilities.

Data: Bronx River Parkway, below Woodlawn, in December, about 2.30 P.M.; overcast sky; dull light; 1/5-second exposure at F/4.5, with Carl Zeiss lens; Agfa pack. Metal-Quinol developer. Enlarged on P. M. C., No. 8.

In its simplicity of arrangement and treatment, Walter E. Owen's "Kathryn" resembles the works of modern portrait painters. A dignified and serious portrait, blending into the background in places, yet strongly relieved and plastic in the head. The artist did well to subordinate the hands. A slight indication of the form of the arm would relieve the rather too solid black mass of the blouse.

Data: Made in Brooklyn Institute Studio, with studio camera, Smith lens, 16-inch focus, at F/8, by light of four electric bulbs; one 500-watt, two 1,000-watt, and one 1,000-watt spot-light. Exposure, 3 seconds, on 8 x 10 Eastman Portrait film, par-speed; Rodinal developer; print on Vitava Athena E Rough.

Honorable Mention

THE frontispiece, "Still Life", by U. Stephen Johnson, is a beautiful example of that type of work, and displays rare technical qualities in differentiation of tones and color interpretation or suggestion. It seems almost beyond adverse criticism, yet we consider it open to slight improvement. The larger vase is a little lacking in roundness, due perhaps to a trifle too much light on the shadow side and the loss of outline on the other, which merges into the background almost completely. In fact, this is true of the left side as well. The jewel-casket is rather indefinite as to detail and texture. A smaller stop in the lens should produce an improved whole.

Data: View Camera, 8 x 10; Velostigmat 12-inch lens, at F/11, with 8-times Afga screen; one-minute exposure on Eastman Commercial Ortho film at 10 A.M. in April, by light from east window and 200-watt bulb; Pyro soda developer. Enlarged on Haloid Enlarging Portraya XX grain.

"Meditation", page 11, by Boris Chudadoff, is a somewhat unusual arrangement, although it reminds us of the cherubs in the old masterpieces. Excepting the face, the lighting is rather flat and causes the arms and shoulders to lose plasticity of form. The hands are very slender and expressive.

Data: Made in September; R. B. Graflex Camera; Verito lens of 6½-inch focus at F/6. Exposure, 2 seconds on Agfa film-pack, by 1,000-watt light. Developed in tray with Rytol. Enlarged on Defender Chloride White Platt. Matt.

A jolly little portrait is "Sunbeam" on page 17, by Anne H. Mellin, and well named. A more delightful or beautiful head and shoulders we cannot imagine, and the artist caught one of those expressions so eagerly sought, but rarely obtained. This little portrait will surely be a "joy forever", and a continual reminder of a happy moment in this sweet child's life. The dancing eyes; the friendly laugh! Ah, these indeed captivate our hearts. The background may be a trifle cut up, and we could do without the part of the dress below the right elbow, which is a bit confused. But we overlook the former and can easily correct the latter. So we return again to the face and forget all else.

Data: Indoors by window; sun directly overhead; Film Camera, 3¼ x 5½, with Modico Anastigmat of 6¾-inch focus. Exposure, 1/10 second at F/7.5, in October, at noon. Elon developer. Azo Carbon A No. 2 paper.

Leonard Purin made a good shot when he got "No Water", on page 18. The general excellence is praiseworthy, all but the soft focus, which is not appropriate to bird photographs. The lower half could well be trimmed off, as the box and pedestal detract from the center of interest. Of course, if it is desired to consider this in its entirety, as design in lights and darks—well and good. But as a bird portrait we do not require the whole of it.

Data: Reflex 3¼ x 4¼ Camera; Struss lens, 7-inch, at F/5.5, with K-1 screen. Exposure 1/15 second, at 10 A.M., in August; good light. Gevaert Ortho. Commercial film. Amidol-tank developer. Gevaert Novabrom No. 1 enlargement.

"Tired Out", by Herbert Saunders, is a good arrangement of two figures. The composition is obviously pyramidal. The little lad looks the part, and somehow we would be just as well satisfied without the girl, who seems unstably posed and unrelaxed.

Data: Harvest field in Leeds, England. Graflex, 2¼ x 3¼; Kodak lens; 6-inch at F/8. Exposure, 1/20 second; in September, late afternoon, sunny. Metol developer. Mezzotone print.

Full of the spirit of youth and mirth is ". . . and the World Laughs with You" by J. V. D. Bucher, page 27. A good worth-while joke evidently has been "sprung". Hence the happy grins and display of ivories. The back-lighting in this instance lends form and variety, as ample exposure was given to obtain sufficient shadow details. A little toning down or handwork with a stump and crayon-sauce on the background could be done with good effect. However, this is not too bad, as it is.

Data: Outdoors in Conway, N.H., in August, sunlight, at 11 A.M. Exposure 1/110 second, with 4 x 5 R. B. Auto Graflex. Zeiss lens of 25 cm. focus, at F/4.5, on Agfa Portrait film. M. Q. developer. Parchment Bromide diffused in enlarging.

W. A. Phillis, in "Pals", page 29, succeeded not only in doing a fine piece of good straight photography, but showed excellent judgment in finishing his work. The boy and dog are placed just as they should be, and it is difficult to think of a better result. The boy appears proud and fond of his little pal, who in turn seems very much at ease and contented. Mr. Phillis is to be congratulated on this result.

Data: Graflex Camera, indoors, in February. The lens opening was F/4.5, and 1/20 second exposure was given on Super Speed cut-film, developed in M. Q. Novabrom paper was used, evidently enlarged.

"Portrait—Paul White", by Alexander Leventon, on page 30, is out of the ordinary in placement. Evidently the artist was after a space arrangement as much as a portrait. *Question:* Do the dark door-frame and white paper contribute to our enjoyment? If so, leave them intact. If not, trim to suite your taste. The lighting of the head brings out the form very well indeed.

Data: Taken by artificial light, (1,500-watt), with 2¼ x 3¼ R. B. Graflex, with Verito lens of 6½-inch focus, used wide open, four seconds' exposure being given on Kodak roll-film, which was developed in Rytol, and an enlargement made on Wellington Hard Cream Chamois. Copper (Tabloid) toned and steamed.

The "Trees of Lombardy" by John Skara, on page 32, resemble the photo-pictorialist's style of composition and form a pleasing arrangement in conjunction with the clouded sky, without which it is doubtful if they would succeed. The slight shadow on the left foreground just saves that space from being monotonous.

Data: Graflex 3¼ x 4¼, with 6-inch lens at F/4.5, and K-2 screen. Exposure, 1/15-second in August, at 4 P.M., in good light, on Panchromatic cut-film. Tank-developed in Amidol. Print on Velour Black, Buff Platt.

Beginners' Competition

"ENTRANCE", by A. J. Krupy, on page 39, captures first prize and is well worthy of that honor. Its harmonious brilliancy is creditable for a beginner. We feel that a little sharper delineation is preferable for such subjects, excepting in very large prints to be hung on the wall.

Data: University of Chicago, in July, clear sky 6 P.M. Icarette L. 2¼ x 3¼ Camera, Zeiss-Tessar 4-inch lens at F/4.5, with Kodak Pictorial Diffusion Disk in front of lens; 1/10-second exposure with camera held in hand. Agfa roll-film developed in tank pyro. Enlarged on Portrait Bromide Buff "O", Old Master, using same camera and lens at F/4.5, in conjunction with home-made enlarger.

Mr. Krupy writes that this is his first print offered in Competition. By taking first prize he immediately passes into the Advanced Workers' class, where his work should prove strongly competitive.

"All Alone", by W. A. Watson, is well placed, and the clouds relieve the large sky-expanse. The camera was held so low as to lose all middle distance, and the effect is that of "edge of the world".

Data: Made in North Staffs, England, in June, 3 P.M., good light. Thornton-Pickard Ruby Reflex camera, 5¾-inch Cooke lens, at F/4.5, with 2-times screen. Exposure, 1/10-second on Wellington Spectrum Pan. plate, developed by inspection in M. Q. Enlarged on Kodak Royal Bromide.

Exposure-Makers' Competition

FIRST-PRIZE print, "Shadow of Washington Monument", by E. B. Crosswhite, was at first thought to have been made from an airplane, but we learned it was made from the monument itself. It is unique and interesting.

Data: Made from the top of Washington Monument in June, afternoon; 2¼ x 3¼ Premoette, single achromatic lens, at full opening (stop No. 1), 1/25-second on Kodak film-pack. Photo finished by Eastman Kodak Stores, Inc., Los Angeles, Calif.

The "Porch and Pump", which James G. Johnson shows us, are calling us to enjoy vacation rest. All that is needful to complete the picture is somebody seated in that chair at the left, engaged in some quiet recreation, such as smoking, reading, or just doing nothing at all.

Data: Made at Long Lake Lodge, Maine, in July, at 4 o'clock; sun in front of camera, which was a Carl Zeiss Ica, fitted with F/4.5 lens. The exposure was one second at F/16, on Eastman film-pack. Photo-finished by Willoughby's, New York City.

The A. K. Cross Vision-Training Method

THIS method was first tried in the Massachusetts State Normal Art School, where class results caused the director to write, "The work of the freshman students excels that of the graduates of former years."

In 1916, at the invitation of the State Board of Education, a course in outline-drawing was prepared for the University Extension Department. Since 1917, a student of Mr. Cross has conducted this class, to which only residents of the State are eligible.

In 1920, the faculty of the Art Museum School petitioned that the method be used in the freshman class, and Thomas Allen, president of the Museum, signed a contract at the time of his death, specifying that Mr. Cross was to teach still-life drawing and painting "by the use of his special methods and devices".

The Art Museum School results from freshman students who had but one lesson a week in painting led to the formation in 1922 of a class for home-study. An exhibition of the work of this class was held in the Rogers Building of the Massachusetts Institute of Technology in 1925. This created such wide interest that Prof. William Boring, director of the Department of Architecture in Columbia University, recommended that the method be used in the University Extension Department of Columbia University. Classes were therefore started in 1926, and Mr. Cross resigned from the Art Museum School in order to take charge of the new classes of Columbia University.

In the first year, 271 students enrolled in the new Columbia class. Of these, 30 per cent. had studied in or graduated from art-schools. Many artists and teachers were among those who thus sought visual power not gained in the art-schools. Gradually the accepted idea that correspondence study in art is a waste of time is giving place to the realisation that this new method "revolutionises present and past methods by teaching in hours what usually takes months and years, thus bringing a sound knowledge of drawing and painting within reach of the average person, regardless of age or condition in life" (A. J. Philpott, *Boston Globe*.)

Enthusiastic students in all parts of the country express gratitude for their new vision, which enables even amateurs who cannot draw to see and enjoy color with the vision of the artist, and the artist paints with increased power and artistic technique.

Further particulars may be obtained from Mr. Anson K. Cross, Winthrop Station, Boston, Mass.

Some Questions and Answers

SHOULD PANCHROMATIC STOCK BE USED IN ROUTINE WORK?

MANY pictorial still photographers do this; but due to the lack of rapidity of the emulsion itself, and the increase in exposure-time necessitated by the filters used, the use of panchromatic stock is not advisable in routine kinematography. It should be kept in a plainly marked magazine, ready for use at any time. When the occasion arises, it is but the work of a moment to remove the magazines of regular stock and substitute a pair which are filled with panchromatic stock.

HOW LONG WILL PHOTOGRAPHIC ARCS BURN?

THIS depends upon the type used. Automatic arcs burn until the carbon is exhausted. Others, the semi-automatic, burn from four to six minutes and then go out, while the arc-lamps which have parallel carbons will burn, on alternating current, until the carbons are exhausted. On direct carbons, the carbons are consumed at different rates; and in time the gap becomes too long to be jumped, and the arc becomes extinguished.

ARE THESE ARCS DANGEROUS TO USE?

THE modern photographic arc is very simple in make-up and use. With the most ordinary care, no accidents of any kind need be feared. They are the safest high-intensity lamp made.

HERBERT C. MCKAY, A.R.P.S.

Poor Ivanhoe

"WHAT part of the body is the fray, teacher?"
" 'Fray?' What are you talking about?"
"This book says, 'Ivanhoe was shot in the fray.' "
St. Louis Globe-Democrat.

ON THE GROUNDGLASS

WILFRED A. FRENCH, Ph.D.

Christopher Columbus

I RECENTLY received a call from a well-known Western amateur who had made a camera-tour through Spain. Among the numerous pictures that he showed me was one of the Casa in Valladolid where Columbus died. This led to a discussion of the identity of the great discoverer, about whom I have read many different and interesting narratives. It would appear that Christopher Columbus was by far a different personality than tradition has pictured him to us. According to a Peruvian scholar and literary investigator, Luis Ulloa, the discoverer was not a Genoese landlubber, but a dashing Catalonian corsair of noble birth, that his real name was Juan Colom, and that virtually everything that has been written about him, previous to his great discovery, is incorrect and needs to be revised. I let my caller read the illuminating treatise by Señor Ulloa—*Boston Evening Transcript* of October 11, last—and he changed his opinion of what he had read about Columbus heretofore. He also entertained some doubts about his mental picture of the discoverer as well as of the photograph he had made at Valladolid. He added that accuracy meant everything to him.

A Bon Mot Worth While

SCENE, on the promenade-deck of an ocean-liner.

Solicitous passenger: "You seem to be alone, little girl. Where is your mother?"

Little girl: "She's sick in bed."

Passenger: "What is the matter with her?"

Little girl: "She has the *mal de mer*."

Passenger: "And your father?"

Little girl: "He's sick in bed, too."

Passenger: "What ails him?"

Little girl: "He has the *mal de père*."

Either

EITHER. In the United States the preferred pronunciation of this word is ee-ther, and in England it is eye-ther; but either pronounciation is allowed in both countries. The correct meaning of either is "one of two". "Please take either chair" and "He asked if either of them was at home, but neither was there" are examples of the way to use the word.

It is not considered good teaching to put before a class examples of what not to do. But this class is mature enough to be able to separate the wheat from the chaff in a discussion of this kind. "Either" in the sense of "both" is archaic and should be avoided. Examples of this use are: "There is a fireplace at either end of the room", and "On either bank of the river were tall trees". These sentences should read: "There is a fireplace at each end of the room" and "On both banks of the river were tall trees".

None

NONE. Whether to use this word with a singular or a plural verb is a question that is not a question. Letters come frequently from persons who wish to engage me in a debate on this subject, but it is not debatable since there are no two ways about it. "None" comes from the Anglo-Saxon "nan" which is a contraction of "ne" (not) plus "an" (one). Since "none" means "not one" it should be followed by the same construction that follows "not one". "None but the brave deserves the fair." "None of us is going because none of us is able to swim."

The authorities all state that the commoner construction after none is the plural verb. This is because it is easier to speak in a slip-shod fashion than it is to express oneself in the best English. Besides the careless ones there are those who do not know that none should be followed by a singular verb. Now is the time for everyone to perfect his understanding and use of the word "none".

RUTH BROOKS, in *Boston Herald*.

A Screen-Picture

"YES, I got a view of the pretty plaintiff. She was dissolved in tears."

"Then it was a dissolving view."

When Spring Is in the Heart

WHEN Spring is in the heart, my friend,
Though round-about the snow
Lies deep beneath cold skies of gray,
Embraces all the glow
Of health and friendliness and love;
Through chilling shadows dart
The cheery beams of pulsing light—
When Spring is in the heart.

When Spring is in the heart, my friend,
What have the years to do
With such a thing as age? 'Tis youth
That dwells for aye with you.
The sap runs full and free and warm,
To every hour impart
The joy of living. All is young—
When Spring is in the heart.

When Spring is in the heart, my friend,
The days are always bright,
Enduring hours, twenty-four—
There really is no night
To those that hold within their breasts
This benison; the chart
Of Life is lit by souls a-flame—
When Spring is in the heart.

When Spring is in the heart, my friend,
The tasks that fall to you,
However complex they may seem,
Are simple things to do.
There looms no labor over-hard,
In any trade or art,
No trial or stress too great to bear—
When Spring is in the heart.

WILLIAM LUDLUM.

THE MONTH IN APPLIED PHOTOGRAPHY

C. B. NEBLETTE, A.R.P.S.
Division of Photography, A.M., College of Texas

Atlas of Emission Spectra

NEW advances in photographic processes, as for instance the development of more efficient sensitisers for the infra-red as well as improvements in apparatus, together with more adequate data on the influence of various conditions in the production of the spectrum on the character of the spectrum has made necessary a new atlas of the emission spectra of the elements. The U. S. Bureau of Standards has fitted up a special laboratory for this purpose and will begin shortly the photography of the emission spectra of all the known elements, with all of the accuracy known to modern spectrography. The Bureau of Standards has always been one of the leaders in this field, more especially in the determination of the positions of lines in the characteristic spectra of the elements and the more common alloys. Aside from the Bureau of Standards, perhaps the most active investigation in spectrography is being carried on at the astronomical observatories, particularly at Mount Wilson and Mount Hamilton. The science of spectrography is advancing rapidly and is daily becoming more necessary to the advancement of science. At the same time, it is daily becoming more complex, both in its nature and in its applications, and the literature on the subject is growing rapidly. In view of the widespread applications of spectrography, photography can well be proud of its service to science in conjunction with the spectroscope.

Some Recent Applications of Photography to Astronomy

ASTRONOMICAL photography is, of course, one of the most important, as well as one of the oldest, branches of applied photography. It is of interest to know that Daguerre, even before the details of the Daguerreotype process had been published, attempted, at the instance of the French astronomer Arago, to make a daguerreotype of the moon. He was unsuccessful, however; but chiefly because of the lack of adequate and efficient driving mechanism for keeping the moon definitely fixed on the plate. Two years later (1840), Draper of New York obtained pictures of the moon one inch in diameter; and ten years later Bond, at Cambridge, using the fifteen-inch refracting telescope at Harvard Observatory, obtained a number of daguerreotypes which showed remarkable detail of the surface of the moon. A little later Bond obtained an excellent reproduction of the double star Mizar. Astronomical photography, however, did not come into its own until the invention of the dry-plate, which made it possible to give exposures of any length desired and, what is almost equally as important, to place the plate in any desired position.

This, however, is not the place for even a brief history of astronomical photography, as interesting as that story would be, nor even for a résumé of its present-day applications. We shall offer merely a few remarks on one or two examples of modern astronomical photography which should be of particular interest to photographers.

In 1924, during the opposition of Mars, Dr. W. H. Wright of the Lick Observatory on Mount Hamilton, Calif., made a number of photographs of the planet using light of different wave-lengths ranging from ultra-violet to infra-red. It was found that the plates made by infra-red light show the highest contrast in surface-markings, though the polar cap shows but little, if at all; on the other hand it is very prominent in the photographs made in violet light. The photographs made by infra-red light are all characterised by a very decided falling-off in distinctness towards the edge of the image, which is a decided contrast to the rather distinct outline of the image obtained by the use of yellow or violet light. The infra-red images are also appreciably smaller than the yellow and violet images, and although some have suggested that this is due to instrumental differences this seems not to be the case. The fading of the infra-red image at the margins makes the exact diameter rather difficult to calculate; but after all calculations and necessary allowances have been made, there is still an appreciable difference in the diameter of the two images. It has been suggested that this is due to the fact that the ultra-violet photographs show not only the diameter of the planet itself, but its atmospheric layer; and in the infra-red plates this atmospheric layer is eliminated in just the same way that the use of red-sensitive materials and deep red filters remove atmospheric haze on earth and render aërial photography from high altitudes possible. Whether this is the true explanation or not, we, of course, cannot yet say. It has at least the merit of affording a reasonable explanation of the phenomenon.

In 1926 photographs of both Mars and Jupiter were made with improved working-methods and under somewhat better conditions of visibility. The results fully confirmed those obtained earlier in 1924.

Dr. Wright has lately made use of the kinematograph to follow the movements of the variable markings on the surface of Mars. No technical difficulties were met with, and photographs were made automatically at three-minute intervals for the whole of the eight hours during which the planet was accessible. Weather-conditions were unfortunately not the best; and, as the film has not yet received the critical study which all astronomical records must receive, it is not yet known just what the film reveals. The results appear, however, to be such as to warrant further investigation of this sort the next time that Mars is available.

A New Series of Motion-Picture Productions for Educational Purposes

ALTHOUGH it is undeniable that there is a certain amount of educational value in the average picture play, it is doubtful if it equals the claims made for it by those intimately connected with the motion-picture industry, or by those who happen to be especially enthusiastic regarding the possibilities of the motion-picture as a medium of education. The picture-play is produced for its dramatic value and as entertainment, and not for the purpose of imparting knowledge; and although this fact does not prevent *certain* pro-

ductions from being valuable from an educational standpoint, it does serve to materially reduce the educational value of the *average* production. If the motion-picture is to fulfill the dreams of those who look upon it as one of the great educational forces of the day, it must do so by the development of films designed definitely for educational purposes and not primarily for their dramatic or entertainment-values.

Although it cannot be said that this field has been entirely neglected, it is true that until the last few years there has been little or no organised effort in this direction. One of the first of these was the series of productions dealing with the history of America issued by Yale University, through Pathé Exchange, as the "Chronicles of America".

Pathé Exchange now announce that a contract with Harvard University has been made for the purpose of issuing a series of productions dealing with various scientific subjects and designed particularly for university, college, school, and scientific society use. It is further announced that the first of the series, which will be known as the Pathé Science Series, will be ready for distribution on or about January 30, 1928. Although the contract mentions specifically only the Division of Anthropology, the Division of Geology has also decided to co-operate in the series; and doubtless other divisions of the University will follow.

As now planned, there will be one set of pictures of a highly technical nature intended for classroom use in universities and colleges. These will follow closely the courses in the various subjects as given at Harvard. It is felt that this series will be of great value to the smaller institutions which are unable to provide laboratories and museums adequate for the purpose, but which are eager to present these subjects in the best possible manner. Another set of more popular productions is to be prepared for high school and secondary school use and for the general public.

The writer, for one, will look forward with the greatest interest to the appearance of the first of this series, as, no doubt, will many others who, although they may not be particularly interested in the specific subjects with which the production deals, feel, nevertheless, that it is an important step in the right direction and one which ought to be encouraged in every possible way.

Storing Photographs for Posterity

UNDER this heading our esteemed cotemporary, the *British Journal of Photography*, announces the decision of the authorities of the Bristish Museum to accept a copy of a jungle film for preservation in the archives of the Natural History Museum at West Kensington. The film is to be sealed in a hermetically sealed, fireproof-case, and is not to be opened for fifty years. The film contains records of the appearance and life history of a number of jungle animals which are expected to be extinct in another fifty years.

There have been several suggestions of like nature in this country, but the writer is unable to say what progress has been made. Al and Ray Rockett, the producers of Abraham Lincoln, offered to present the National Museum with a copy, if it would be properly stored away and not opened for a hundred years; and a few years ago something was said about the formation of film-archives at the Smithsonian Institution in Washington and also at Harvard University; but no statement is available as to what has actually been accomplished in this direction. If such a collection is begun, we have a few productions which we should like to nominate for the honor of inclusion in the collection.

Four More Traveling Finishing Stations

KINEMATOGRAPHERS who embark on the *Franconia*, January 7, for a cruise around the world, on the *Laconia*, January 14, for a cruise around Africa, on the *Carinthia*, January 21, for a cruise to the Mediterranean, or on the *Samaria*, January 28, for a cruise to the West Indies, will be privileged to enjoy unusual film-processing service. This will be brought about through the installation of Ciné-Kodak processing laboratories on each of these palatial cruise ships.

Last year, for the first time in history, the Cunard line steamship *Carinthia* was equipped with a processing station. During all the long cruise around the world, this station worked day and night to process the hundreds of films which were exposed by enthusiastic amateurs aboard. The venture proved to be such a pronounced success that the Eastman Kodak Company, through co-operation with the Raymond and Whitcomb Company, conductors of the three cruises last named above and Thomas Cook and Son, conductors of the first-named cruise, has arranged for installation of laboratories on these ships.

This will enable the amateur to send his films in to the laboratory on the very day upon which the exposures are made. Projection-rooms will be furnished, so that he may determine the quality of the pictures he has made while the ship is passing through varying climatic belts. Errors of exposure brought about by these changing climatic and atmospheric conditions can readily be corrected, once the amateur can see the quality of the pictures he is making. Aside from this, the convenience of a finishing-station right on the ship is an innovation in amateur kinematography that will be appreciated by all who have made movie records of their jaunts to foreign lands.

On each boat the personnel and equipment will be prepared to develop Kodak Films as well as Ciné-Kodak Films. Stocks of Ciné-Kodaks and Kodaks as well as film and accessories, will be carried. Cruisers are requested, however, to make their purchases of cameras and equipment before going aboard the ship.

The Ciné-Kodak News.

Improvement in Photographic Drafting

EDITOR OF PHOTO-ERA MAGAZINE:

In the December issue of PHOTO-ERA MAGAZINE appeared an article originated in *The Bell Telephone Record* by Mr. W. L. Heard, pertaining to the reduction of drafting-expense by photography.

As a draftsman in The Bell Telephone Laboratories, and the inventor of the method referred to, I beg to say that although it has proved a very economical means for making drawings on tracings, it might be of interest to inform you that this improvement has already been abandoned, as I found a still more efficient method, as follows:

The photograph to be drawn is now enlarged on P. M. C. No. 5 Bromide, then traced in ink and bleached with cyanide-iodine bleacher. The completed figures are mounted on pasteboard of standard drawing size for reproduction. This latter improvement is speedier than my first discovery, resulting in considerable saving of time.

Very respectfully,

EDWARD ALENIUS.

A Reflection

CUSTOMER: "I'd like to see something cheap in a straw-hat."

Clerk: "Put this one on. The mirror is on your left."

LONDON LETTER

CARINE AND WILL CADBY

THE Remembrance Festival was broadcast from the Royal Albert Hall, London, on Armistice evening. It was relayed to the United States, Canada, Australia, New Zealand, etc., and other countries. There was Community Singing on a very big scale, when many of the war-time songs of the troops, an address by the Prince of Wales, and some old and always popular hymns were given.

As we listened-in, deep in the country-side, by means of our portable radio-set, we could not help regretting that a program offered to the whole world of English-speaking people had not been better staged and selected; for it was difficult to believe Americans or Australians would find much to interest them in the continual singing over of the same ditty, while "records" were being taken and local jokes were passing between the conductor and the great assembly of singers. A message that was intended to reach many millions all over the globe should surely be better thought out and arranged than a monster barrack-room singsong.

The wonder of wireless is still upon many of us; and, no doubt, makes for tolerance of the performance heard; but already we are realising how very many sound-effects will not, and cannot, "get across" without visual help. And here is where we suppose that photography of some sort will eventually come to the rescue, if it has not indeed already begun to do so. So many lecturers and entertainers are unconvincing without the sight of their personalities to emphasise the spoken word. We would go further and say that many of the speakers heard on the wireless, on this side, are simply insufferable. They lack some subtle artistry of expression, or it may be even of thought, and the matter is often spoilt by the manner of speaking. Possibly, they have not yet grown accustomed to the microphone and are self-conscious and stilted. An outstanding exception is Sir Oliver Lodge, one of our oldest and most famous scientists, who has been giving many talks on the wireless lately. His matter is often difficult for the ordinary listener to follow; and yet he is so natural, human, and sympathetic that he throws a light on the most abstruse subjects and holds his audience spellbound.

But wireless has one enormous blessing—it can be unceremoniously switched off without rudeness to the performers, whatever their art. Wedged in the middle of a concert-hall, a church, or any other gathering, one must suffer the whole performance whether one approves it or not. But with a portable radio set, placed conveniently within arm's length of the fireside-corner, the flight from the boring or stupid or vulgar performance is easy, rapid, and unostentatious.

A negative of "Chang", the wild animal film, has lately been accepted by the trustees of the Natural History Museum, South Kensington. In this country the preservation of films has received very little attention, and we wonder how many years of life "Chang" may reckon on. A series of problems are involved which are not yet properly understood. One of the simple and obvious difficulties is that a celluloid film kept rolled for a year or two shows signs of curling, and it becomes difficult to make a positive from it. The librarian of one firm has found it necessary to undertake the systematic unrolling of the films in his library from time to time, after which they are re-rolled the opposite way.

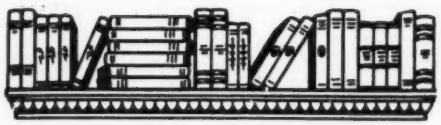
The life of a film is to a great extent dependent on the time and care taken over development; and, in the case of topical films, this process is naturally hurried and often simplified in a way that no doubt much shortens its natural expectation of life. We are told that the hard-worked student of a century hence is not likely to have many 1927 film records to investigate. Let us not be downcast by the thought, but rather rejoice that much we are ashamed of will not survive to be ridiculed by a future generation.

When keen photographers lay aside their craft for a time, it generally happens that their released energies flow strongly in some other direction; which, perhaps, shows what an absorbing study photography can be, and that active minds and deft hands, once released, will certainly excel in some other direction.

We hear that Mr. F. H. Evans, who for many years was unrivaled in the sympathetic portrayal of cathedral interiors—and we have seen nothing to surpass his work in present-day exhibitions—has taken to cutting his own pianola records. He claims they are vastly superior to the commercial variety, and he knows what he is talking about, for he was an enthusiastic pianola player in the earliest days.

As photographers, we are quite accustomed to people—victims, they like to be called—making a great fuss at being photographed. Women, especially, in a way which deceives no one, assure us how they hate the ordeal, comparing it to all kinds of torture; but they immediately withdraw every objection as soon as our persuasions cool. Many men genuinely dislike being photographed; and, when they visit a studio, it is usually to please some one else. Still, one would hardly imagine that being photographed would result in such a tragedy as we heard of recently. A man named Butler was arrested and subsequently released when his innocence was proved. An unpleasant experience, certainly; but all might have been well had not the police insisted on making Butler's photograph. Being evidently a highly sensitive and self-conscious person, this preyed on his mind to a serious extent. He visited the police and complained, but was assured that no photographs are ever printed of a man before he is convicted and that the negative in question had already been destroyed. The fact, however, that the photograph had been made, appears to have so obsessed him—making him feel, as he said, a marked man and a criminal—that he committed suicide.

We remember a less tragic story of a photograph that should not have been made. Some young friends of ours visited a well-known professional's studio on the eve of their engagement, and a few copies were bestowed on intimate friends before announcing the happy event. Unfortunately, the happy event never was announced for a quarrel parted the lovers; and unfortunately, too, the group was such good photographic work and so pictorial that no one had the heart to destroy his copy; consequently this tiresome evidence of the might-have-been was always turning up at the wrong moment. Snapshot-photography does not count; but this serious studio kind can be as formidably evidential as the written letter.



BOOK-REVIEWS

Books reviewed in this magazine, or any others our readers may desire, will be furnished by us at the lowest market-prices. Send for our list of approved books.

HANDBOOK OF MOTION-PICTURE PHOTOGRAPHY, by Herbert C. McKay, A.R.P.S., Dean of the New York Institute of Photography and Editor of Amateur Kinematographer Department of PHOTO-ERA MAGAZINE. 283 pages, with diagrams and illustrations. Price, cloth, $3.00. New York: Falk Publishing Company.

It is with very real pleasure that we call our readers' attention to the latest photographic textbook by Herbert C. McKay, A.R.P.S., motion-picture editor of PHOTO-ERA MAGAZINE. Mr. McKay has the happy knack of imparting information without involving the reader in too great a number of scientific or mathematical formulas. His desire is to assist the average amateur or professional cameraman and not the technically trained scientist. Although every effort has been made to be extremely accurate, care has been taken to make the text understandable to those who are not familiar with the complicated mathematical formulas and definitions of a scientific treatise.

In the latest book by Mr. McKay, the reader will find that the subject has been so considered that it will be of practical and immediate value to the owner of a professional or an amateur motion-picture equipment. Furthermore, there is an excellent introduction which will enable the beginner in motion-picture photography to make rapid progress in the fundamentals of kinematography. Some of the chapters are devoted to the following subjects: Principles of Kinematography; Camera, Lenses, and Accessories; Tripod Cameras; Portable Cameras; Substandard Cameras; The Motion Camera in Use; Titles; Laboratory Work; Editing the Film; Projection; Some Typical Projectors; Special Methods; Trick Work; Practical Applications; Bibliography, and a Glossary of motion-picture terms. The illustrations and diagrams, tables of hyperfocal distances, developing formulas, and other practical working-data will be found of tremendous value in helping the reader—beginner, amateur, or professional—to make successful pictures without costly expenditure of time and material in haphazard experimenting. The "Handbook of Motion-Picture Photography" is being used as a supplementary text in the motion-picture courses of the New York Institute of Photography. It is pocket size, well printed, and should be in the hands of all those who wish to make a success of amateur or professional kinematography.

Mr. McKay is a practical cameraman himself, a designer of motion-picture equipment, a laboratory research expert, and is always working to improve the artistic as well as the technical branches of kinematography. Furthermore, he thoroughly enjoys his work, and this fact is reflected in his writings and in the assistance which he so willingly gives to all readers of his department in PHOTO-ERA MAGAZINE.

THE AMERICAN ANNUAL OF PHOTOGRAPHY, 1928. Edited by Frank R. Fraprie, F.R.P.S. and E. J. Wall, F.R.P.S. 224 pages and 94 full-page photographic illustrations, additional text-illustrations and diagrams. Price, paper cover, $1.50; cloth, $2.25. Boston: American Photographic Publishing Company.

The arrival of the new "American Annual of Photography" is always anticipated by amateur and professional photographers in all parts of the world. Other countries feature the work of their own pictorial photographers, and the interchange of these photographic annuals has done much to build up good will and a friendly rivalry among the leading pictorialists of the United States, Canada, Great Britain, Germany, France, Belgium, Italy, Russia, Japan, Australia, and other countries. This year we note much improved typography, text-matter, and illustrations.

It is interesting for us to note that the following pictures in the Annual were also entered or reproduced in connection with PHOTO-ERA competitions: "The Cigarette", L. H. Longwell; "Castle Mountain", R. Morita; "The Cabin on the Hill", G. P. Wright; and "At The Landing", Mary Callaghan. All groups or classifications of pictorial photography are represented in the illustrations and are of great practical value for study and comparison. The articles are adapted to a wider circle of readers than last year, and they will be found to meet the needs of all classes of readers. On the whole, we feel that a distinct improvement has been made and that the 1928 Annual has a very practical and truly helpful message for every lover of photography. We understand that the edition is limited, and we therefore suggest that our readers place their orders without delay. We can make prompt shipment so long as our stock lasts.

THE COMPLETE PRESS PHOTOGRAPHER, by Bell R. Bell. 188 pages. 21 halftone photographic illustrations and examples of salable news-pictures. Price, cloth, $2.50. New York: Isaac Pitman & Sons.

Those who wish to improve their knowledge of what does or does not constitute a salable news-picture will find much help and inspiration in "The Complete Press Photographer" by Bell R. Bell, otherwise well known as "Focal-Plane" to the readers of the *British Journal of Photography*. Although the book deals with press-photography in Great Britain, the fundamentals clearly outlined in this book will be found to apply in all parts of the world.

The text is devoted to the subjects of Camera Equipment, The Darkroom and Adjuncts, The Plan of Campaign, Manipulation—The Job Itself, Writing Up and Circulating Prints, The Market, Selling-Methods, The Keeping of Records, Specialist Pictures, Miscellaneous Types of Pictures, Financial and Other Details, What We Want, The Leading Papers and Journals Using Photographs. A feature of this book is the use of many pictures which have actually been published and which are thus convincing examples of what constitute salable pictures. Mr. Bell and the publishers are to be congratulated in rendering a very timely and practical service to amateur and professional photographers. The book is well printed, conveniently arranged, and a very practical answer to those who ask for information relating to press-photography.

[Owing to lack of space, several book-reviews have unavoidably been postponed to the February, 1928, issue. We regret the necessity to do this at a time when so many excellent publications are coming on the market. This is an exceptional winter for good reading-matter.—EDITOR.]

HERE, THERE AND EVERYWHERE

To ensure publication, announcements and reports should be sent in not later than the 5th of the preceding month.

Brooklyn Institute Photographic Department Joins A. C. C. of A.

With the recent application of the Department of Photography of the Brooklyn Institute of Art and Science to become affiliated with the Associated Camera Clubs of America, that organisation now comprises practically all of the active photographic clubs and societies in the United States. There are now over thirty cities represented in the Association by active members, in addition to several Contributing Members such as the photographic trade organisation; and the progress of the A. C. C. of A. bids fair to rival the Royal before many years pass, if past growth can be used as a guide. This year's Print-Interchange was the most successful yet arranged, the prints being of a much better quality than ever. Seventeen clubs participated by submitting sets of about forty prints each. The Los Angeles Camera Club won the Print-Interchange Cup for 1927, with the Cleveland Photographic Society a very close second. The prints were judged by a jury composed of Mr. Carle Semon, pictorialist and salonist of Cleveland; Mr. Harry W. Greene, treasurer of the A. C. C. of A. from Cincinnati; and L. F. Bucher, president of the A. C. C. of A. from Newark, N.J.

International Salon, Prague, Czechoslovakia

The First International Salon of Pictorial Photography at Prague, Czechoslovakia, has been organised by the Association of Czechoslavak Clubs of Amateur Photographers at Prague. It will be held at the Galleries of the Society of Fine Arts of Bohemia, March 9 to 27, inclusive, 1928. The patron will be the Minister of Public Instruction. Of special interest is the fact that Dr. D. J. Ruzicka, formerly of New York City, is a member of the Selecting Committee. The last day for receiving prints will be February 1, 1928. Entry-blanks and information may be obtained from Hon. Secretary Jan Volny, Liliova 8/III, Prague I, Czechoslovakia.

The American Legion Monthly Photo-Contest

Prizes aggregating $250 will be awarded for the fifteen best photographs submitted for publication in the Keeping Step Department of *The American Legion Monthly*. The contest will close April 15, 1928. Members of any post of the American Legion are eligible to compete. The purpose of the contest is to encourage each post to appoint one of its qualified members to act officially as Post Photographer. Further particulars may be obtained by addressing Editor, Prize Photograph Competition, *The American Legion Monthly*, Indianapolis, Ind.

Our Sympathy to Dr. Pardoe

Within the past few weeks we have had some correspondence with Dr. J. B. Pardoe, the well-known pictorialist of Bound Brook, N.J. Although he said little about himself, we read between the lines and we know that our good friend has been seriously ill. Needless to say, we extend our sincere sympathy. For a pictorialist as active and as successful as Dr. Pardoe to be denied the use of his camera and the pleasure of being out of doors is a real hardship. Incidentally, the cover of the Seventeenth Annual Report of the New Jersey Audubon Society is adorned with one of the Doctor's charming bird-studies. The Audubon Society is to be congratulated on having such a distinguished member.

How About This, Phil?

It happened at Fowler & Slater's on Euclid.

George Cook: "Give me two dozen lantern slides."

Girl Clerk: "What size?"

Cook, flabbergasted: "Why-y-y-y-wha-wha-what sizes have you got?"

Thru the Darkroom Door.

The Simplicity of Modern Photography

Many a camera user, even though he be filled with enthusiasm, works with the hobgoblin of failure ever at his elbow. In most such cases it is a faulty realisation of the nature of photography that produces the never-ending crop of useless negatives and feeble, disappointing prints. The truth is that photography, although truly an art, has been built up on a scientific foundation, and, for this reason, is continually evolving. As a rule, the unsuccessful photographer is one who refuses to take advantage of the enlightenment brought about by scientific research and to improve his working-methods accordingly.

If any photographer needs to be convinced of the importance of the influence of science on practical photography, we advise him to get a copy of an attractive little book that has just come into our hands. The title, "Scientific Simplicity in Photography", will appeal to all thoughtful photographers, and the contents of the booklet can certainly be commended to camera-users of all grades of skill and experience.

Photography robbed of all its old bogeys and bugbears is a simple, inexpensive and delightful hobby, and in this booklet the way to the greatest possible simplification of technique is made plain. It shows why the progressive photographer has abandoned the messy and often stale solutions in cumbersome bottles for the up-to-date "Tabloid" Photographic Chemicals, which make always for simplicity, cleanliness, and economy.

The old-fashioned darkroom is now superseded to a large extent by the modern technique of desensitising, and those who are not well acquainted with this process will doubtless find food for reflection in the details clearly set forth in this booklet. Exposure and development—two most important steps in the production of a good picture—are dealt with at length, and there are numerous tables covering all classes of films and plates. With this guide before him, the adventurer along the path that leads to success in photography will escape countless pitfalls and learn how to resist the enticements of many a will-o'-the-wisp.

Although so filled with information, this book will be sent, post free, to any reader mentioning this journal and applying to Burroughs Wellcome & Co. (U.S.A.) Inc., 9–11 East 41st Street, New York City.

Publicity Plans for P. A. of A. Convention

ACCORDING to present plans, the Forty-sixth Annual Convention of the Photographers' Association of America is going to have the benefit of one of the most aggressive advertising campaigns that the Association has ever conducted. Secretary Vinson reports that according to present plans that have been approved by the Board of Directors and the Manufacturers' Bureau, over 300,000 separate pieces of advertising matter will have been distributed to the photographers of America by the time the Convention opens.

In addition to the plans to reach the photographers, $1,150 has been appropriated to see that the Convention secures the proper publicity in Louisville itself, in order that the photographers in that vicinity can "cash in" to the greatest possible extent on the benefits of having the Convention in their home city.

It is proposed that the publicity plans developed for this Convention be used as a model for the meetings of the local, State, and district clubs throughout the country. The Board of Directors have felt for a long time that our affiliated organisations were not "cashing in" on the publicity possibilities of their meetings, and so here decided that the publicity plans for this Convention shall be most extensive and as carefully planned as possible.

Mr. H. Hesse, vice-chairman of the Commercial Section and a prominent photographer of Louisville, has been appointed chairman of the Local Publicity Committee. He has employed John H. Hoagland, publicity expert of Louisville, to assist him in this work.

Plans for the program are rapidly being developed, and it is expected that by the middle of January the program will be completed.

L. C. VINSON, *Secretary.*

Edinburgh Photographic Society, Scotland

THE Sixty-fifth Annual Open Exhibition of the Edinburgh Photographic Society will be held in the Society's hall at 117 George Street, Edinburgh, February 11 to 25, inclusive, 1928. Closing date for entries will be Saturday, January 28. Entry-blanks and further information may be obtained from Gilbert Cousland, Hon. Exhibition Secretary, 117 George Street, Edinburgh, Scotland. We have a few entry-blanks which we shall be glad to send to any of our readers upon receipt of two cents in stamps. This exhibition is one of exceptional interest and value. We hope that there will be a large and beautiful representation of prints from American pictorialists.

New Movie Reviews for Amateurs Ignore Stars—Credit Technicians

A MOTION-PICTURE reviewing department has appeared in a national magazine which breaks all movie-review conventions. The famous stars are ignored. In fact, actors and actresses are not mentioned at all. Whether a film is good or bad, as a whole, is not considered important. The place in the sun in these reviews is reserved for the erstwhile lowly cameraman, the cutters, and hitherto largely ignored technicians. A single effect in a single scene may be the subject of the entire review. And, yet, its originators declare this unique procedure is not followed because of contrariness, or from the desire to do something different, but because of a genuine demand for exactly this sort of reviewing on the part of its readers.

The magazine is *Amateur Movie Makers*, published by the Amateur Cinema League, a non-commercial organisation of the large army of amateur motion-picture makers which has sprung up all over the world during the last two years. These amateurs do not go to the theater for enjoyment alone, it is said, but to study professional films, to surmise how they were made, how effects were obtained, and how they can be simulated by amateurs in their own filming.

Therefore, they require of reviews designed for their guidance, first, that they should be told which films, of the great number being exhibited, should be seen for help and inspiration. Secondly, they find it helpful to be forewarned as to just what effects they should watch for. They are particularly interested, it is said, in the new experiments which the professional technicians have made successfully, as it is in the field of experimentation that they find the greatest pleasure.

The importance of this amateur motion-picture activity, aided by this type of reviewing, is indicated by the belief of such professional authorities as David Wark Griffith and Robert Flaherty that the greatest advances in the art of the Kinema will come from these same amateur-experiments.

Fort Dearborn Camera Club

THE Fort Dearborn Camera Club will hold its annual Members' Exhibit at the new clubrooms, 537 South Dearborn Street, Chicago, from January 27 to February 11, 1928.

This show was postponed from the regular schedule in November, due to the fact that we moved into more attractive quarters at that time. The exhibition-rooms will be open every evening. Those interested in pictorial photography are assured a friendly welcome.

L. H. LONGWELL.

The Welcome "Wellcome Exposure Calculator"

THE annual appearance of this extremely interesting and useful little handbook is awaited with great anticipation by many who rely upon it year after year. No effort has been spared by the compilers to make the 1928 issue up-to-date, popular, and helpful. A brief review of its contents will reflect the scope and character of the book.

The frontispiece shows a splendid reproduction of an Alsatian wolfhound produced by two-color toning. The toning-method is explained in detail and is novel and interesting. Facing the title-page is an official photograph of the Duke and Duchess of York's Royal Tour to New Zealand and Australia.

The literary contents are written as simply and directly as possible and include articles on development by all methods, desensitising, intensifying, reducing, printing, toning, etc. In the exposure-section all the plates and films, bromide, and gaslight papers have been carefully tested and the speeds revised. The list has been made complete by the addition of all the new material brought upon the market up to the time of publication. An article on exposure in kinematography will be appreciated by the ever growing number of motion-picture workers.

The book is clearly and progressively arranged so as to provide a complete guide to picture-making, from the calculation of the correct exposure to finishing the print, and includes a host of practical tables, suggestions, and tips equally indispensable for the beginner and the expert. Four editions are issued respectively for Northern Hemisphere and Tropics, Southern Hemisphere and Tropics, Australia and Tropics, and United States of America.

Fifth Annual Exhibition of Pictorial Photography, Appalachian Mountain Club

THIRTY-FIVE members entered 123 prints in this exhibition, held December 12–28, 1927: First award, Franklin I. Jordan, "Mount Pleasant Sheds Her Wraps"; second, William D. Gooch, "On the Crawford Trail"; third, Dr. Ralph C. Larrabee, "September Hay". Several Honorable Mention prints were designated by the Jury of Awards, which comprised Messrs. Louis Fabian Bachrach, A. J. Philpott, Paul J. Weber. The Exhibition Committee included Alice E. Buff, Henry O. Glidden, Albert C. Sherman, Jr., and Harold I. Orne, Councillor of Art.

Camera Club of Syracuse, N.Y.

WE wish to announce further in regard to the Syracuse Salon to be held in March, 1928, that we will issue ten Certificates of Honor to the ten best prints exhibited, regardless of class. The certificates will be suitably engraved and will be a deserving momento of our exhibition.

We are indebted to this departure from the usual in this country to a suggestion from our fellow associate, Mr. Harold W. Cole, president of the Schenectady Camera Club. Our committee felt that his counsel was deserving of favorable action.

RODERIC M. WILDER, *Secretary.*

The New Jos. Schneider & Company Xenon F/2 Lens

THOSE who have kept up with the offerings of this famous factory and learned what to expect from any lens bearing this name will be interested in this latest product.

When speed-lenses became so much in demand, each factory strove to exceed the others in offering high-speed lenses. Definition and covering-power seem to have been forgotten in their race, until we have numerous exceedingly fast lenses, none of which has the definition necessary for the average motion-picture requirements.

Jos. Schneider & Co. put their research laboratory on this problem, and it was many months before their head mathematician (Dr. A. W. Tronnier, E.O., and member of D. G. F. A. O. and D. K. G., earlier E. O. of the firm of Hahn-Goerz) was satisfied that he had something worthy to bear the name of Jos. Schneider & Co.

The Xenon F/2, as this lens is named, is an adaption of the Gaus formula in a simple and effective manner. Six elements are used in the half-cemented form. Tests revealed the Xenon remarkably free of coma, which is so common in high-speed lenses. Color-workers were very enthusiastic about their color-correction. This makes the lens particularly valuable for use with the new panchromatic films. Their correction for spherical aberration is such that they can be used at an angle of 55 degrees at full aperture and 72 degrees stopped down to only F/3.5.

It will be seen that with a speed-lens of the covering-power of the Xenon, much shorter focal lengths can be used, with consequent increase in the depth of focus. This tends to reduce the bulk as well as expense of the lens.

Speed is essential in motion-picture photography; but when it is obtained at a sacrifice of the other necessary qualifications, it ceases to be desirable. The Xenon lens, when properly used, solves one of the most serious problems that amateur and professional motion-picture operators have had to contend with.

Burleigh Brooks, 136 Liberty Street, New York, the United States agent for Schneider lenses, informs us that his idea of an adjustable focusing-mount has been worked out and patented in the Xenon that is adapted for the Filmo motion-picture camera. It is known that, in fitting high-speed lenses, there are often slight variations in the focal point of the lens and in the mountings which cause the lens not to register properly with the film. With the new mount, in which these lenses are supplied, there is a knurled knob that enables anyone to focus the lens properly for the infinity point after the lens is screwed into place. The infinity-marker is then placed in position and the adjustment locked by means of small screws. This automatically places the focusing-scale for all other distance in the proper position. Another adjustment permits the focusing and diaphragm-scale to be placed in the position most easily seen.

Do You Want to Exhibit Prints at the Japan Salon?

THE Second International Photographic Salon of Japan, under the auspices of the All-Japan Association of Photographic Societies, will be held in Tokyo, May 1 to 14, 1928, and at Osaka, June 1 to 7, 1928. This Association extends a cordial invitation to all American photographers to exhibit, and it is open to both professional and amateur photographers. The conditions of entry are as follows:

1. Prints of any photographic medium may be submitted.
2. Prints of one contributor must not exceed six in number.
3. Size of prints must *not* be less than eight inches in length.
4. Foreign contributors must send *one dollar,* or its equivalent, as the entrance-fee. Several contributors forwarding their entries together must each send the fee.
5. The entrance-fee and entry-form must be sent separately from the prints. The entry-form must be accompanied by remittance, addressed to The International Photographic Salon, Tokyo Asahi Shimbum, Tokyo, Japan.

The last day for receiving prints is March 31, 1928, and any photographer in the United States who is interested in exhibiting can obtain an entry-blank from the Wollensak Optical Company, Rochester, N.Y.

"Everything Resisted Us"

THERE is a story told of a little boy who was not at all malicious or disobedient, but who had the unhappy faculty of being caught with those who were accused of this or that boyish prank. Then, too, he always seemed to be the one to tear his trousers, lose his cap, fall in the mud, and otherwise get into difficulties. One day, after an unusually large number of unfortunate incidents, the little fellow was overheard to say, "Gee, *everything* resists me!" We felt much the same way while we were trying to get this issue ready for press. The mails were late, material arrived several days behind schedule, advertising cuts took an unprecedented length of time to reach us, last moment changes had to be made in our forms, some copy was too long or too short for certain pages—altogether, everything seemed to resist us. However, thanks to the holiday spirit, we have tried to keep smiling through it all and to find comfort in the hope that our readers and advertisers will be patient with any shortcomings which may appear in this issue.

——THIRD YEAR——

SPECIAL PHOTO-ERA TROPHY CUP

To Be Presented To The Organised

American or Canadian Camera Club

Whose members win the most prize-awards in the PHOTO-ERA monthly competitions during the months of September, 1927 to June, 1928, inclusive.

THE OBJECT

To stimulate increased activity among members of organised camera clubs in the United States and Canada and to encourage the establishing of new camera clubs

Read the Conditions and the Rules

1. Any member in good standing of an organised camera club or photographic society in the United States or Canada is eligible to compete for points for his club, in addition to receiving for himself the usual prize-awards.
2. The club or society of which he is a member must be a regular subscriber to PHOTO-ERA MAGAZINE. *Individual club members need not be subscribers to compete.*
3. A handsome solid silver cup (valued at $50.00) and suitably engraved will be presented to that camera club or photographic society whose members win the largest number of prize-awards in PHOTO-ERA monthly competitions—Advanced and Beginners'—during the months of September, 1927 to June, 1928, inclusive.
4. The PHOTO-ERA TROPHY CUP may be retained by the winning club for one year. It must then be surrendered should another club win the cup. However, when a club wins the PHOTO-ERA TROPHY CUP three times—not necessarily in successive years—the cup will then become the permanent property of that club.
5. In case of a tie, a special competition will be held to determine the winner.
6. Each month the score will be printed in PHOTO-ERA MAGAZINE so that all may know the standing of the various camera clubs or societies.
7. IMPORTANT. Those who wish to score points for their own camera club must write the name of their club plainly in all communications, on data-blanks and on prints. Otherwise proper credit cannot be given.
8. Each prize-award will score one point. That is, there are five prizes altogether to be awarded each month in both competitions. If members of the same club should happen to win all five, their club would be credited with five points. If not, the club would be credited with one or two points, depending upon whether or not any of its members received a prize-award. *Honorable Mention awards will not be credited.*
9. Our regular competition rules will apply to all prints submitted.

PHOTO-ERA MAGAZINE

WOLFEBORO, NEW HAMPSHIRE, U.S.A.

(Seattle Camera Club Winners of Cup, 1925-1926)
(Fort Dearborn Camera Club Winners of Cup, 1926-1927)

THE EDITOR'S CORNER

Our Sincere Thanks to All

As we go to press with this first number of PHOTO-ERA MAGAZINE for 1928, we wish to express our sincere thanks and appreciation for the many Christmas and New Year messages which have come—and are coming—to us from our readers and advertisers. It warms the heart and is a tremendous encouragement to know that in the rush of holiday activities our readers and advertisers have stopped long enough to think of us and to send a cheery word of good will. It is just such touches of human kindness and interest which make life worth living for all of us. We all have our problems, we all make our mistakes, and we are all trying our best to be of service to others. When a word of appreciation and kindly interest comes to us from those we are trying to serve, it gives us all the courage to carry on and to do better. We hope that our readers and advertisers will receive from others similar expressions of good will and appreciation.

PHOTO-ERA PUBLISHING COMPANY, INC.

Photo-Era Trophy Cup Race-Scores

THERE have been some changes in the scores as a result of the judges' decisions in the matter of awarding prizes and points to camera clubs. Much to the regret of all, Dr. Max Thorek unintentionally forfeited the one point credited to the Fort Dearborn Camera Club by overlooking one of the competition rules. How it happened is explained elsewhere on this page. Last month the Seattle Camera Club, Fort Dearborn Camera Club, and Brooklyn Institute were tied for first place, with one point each. Now matters are changed and a fourth competitor has scored.

In the competitions ending November 30, 1927, the First Prize in the Advanced Competition went to Edward D. Mudge of the Brooklyn Institute. Third Prize was awarded to Wm. O. Yates of the Cleveland Photographic Society. Second Prize in the Beginners' Competition was awarded to Frank S. Ide of the Seattle Camera Club. Other prizewinners in our competitions were not members of any camera club according to the data and our records. Bearing in mind that the Fort Dearborn Camera Club loses its one point because an important rule was overlooked, the standing of the camera clubs, according to our records, is now as follows:

Seattle Camera Club	2
Fort Dearborn Camera Club	0
Brooklyn Institute	2
Cleveland Photographic Society	1

Our New Motion-Picture Section

WE were the first American photographic magazine to venture into the untrodden field of a department devoted to the amateur kinematographer. We did so at a time when not a few amateurs, dealers, and manufacturers believed sincerely that successful amateur motion-pictures were not likely to become very popular. Today, our cotemporaries have all followed our pioneering, and have added amateur motion-picture departments. We are glad of it; it all helps photography. To Mr. Herbert C. McKay, A.R.P.S., belongs the credit for beginning the department devoted to the interests of the amateur kinematographer. He has tried very hard to make it worth while, practical, and constructive. We believe that he has succeeded.

Now we pioneer again. Perhaps, again, we shall receive the implied compliment of being followed—and perhaps not. At any rate, we have decided to place all material relating to motion-pictures in a section by itself. Our idea is to focus the attention of our readers on the text-matter and advertising relating to motion-picture equipment and accessories. We believe that this change will be of advantage to our readers and to our advertisers. In this issue we make a beginning. As we go along we shall probably make improvements, and we hope to receive the co-operation of our readers and advertisers. Really, this is a matter of mutual benefit.

An Unintentional Violation of the Rules

SOMETIMES things seem to go all wrong as a result of an unintentional oversight or a momentary neglect to check up rules and regulations, due to one's being a very busy man or woman. It is particularly embarrassing when the person who is guilty of any infraction of the rules enjoys an irreproachable professional and personal reputation. In such a case, there is no question of the person's integrity or motives; it is merely necessary to state the facts, offer the sincere apologies of the unintentional rule-breaker, and adjust matters as fairly and sympathetically as possible.

In the recent Miscellaneous Advanced Competition, ending October 31, 1927, Dr. Max Thorek, well-known surgeon, pictorialist, and member of the Fort Dearborn Camera Club of Chicago entered his beautiful print, "Professor Edoardo Perroncito". It was awarded First Prize. It also won one point in the PHOTO-ERA TROPHY CUP RACE for the Fort Dearborn Camera Club. When notified of his success, Dr. Thorek expressed his desire to have the award in the form of the PHOTO-ERA PRIZE CUP. Just as these arrangements were completed, Dr. Thorek suddenly discovered that he had unintentionally violated Rule 2 of the Advanced Competition by sending a duplicate print to *Camera Craft* before the PHOTO-ERA Judges had announced their decision. He immediately communicated with us, expressed his chagrin, and offered to abide by our decision in the matter. In the meantime, the judges of the *Camera Craft* Competition also awarded this same print First Prize and forwarded a medal to Dr. Thorek.

In the circumstances, and with the sincere desire to be just, and yet not too severe on our contrite friend, we have decided to let our award of First Prize stand so far as Dr. Thorek is concerned. However, in fairness to other camera clubs which are competing in the PHOTO-ERA TROPHY CUP RACE, we will *not* allow the one print in favor of the Fort Dearborn Camera Club of which Dr. Thorek is a member. We believe that this mutually embarrassing, although unintentional, error will serve to emphasise the great importance of a thorough reading of the competition-rules before submitting prints.

MOTION-PICTURE SECTION

FEATURING

The AMATEUR KINEMATOGRAPHER

Edited by

HERBERT C. McKAY, A.R.P.S.

Dean of the New York Institute of Photography
Author of several motion-picture text books

AND THE

ANNOUNCEMENTS OF MOTION-PICTURE MANUFACTURERS

AND

DEALERS IN AMATEUR EQUIPMENT AND ACCESSORIES

A Department Conducted for and by
Photo-Era Readers and Advertisers

THE AMATEUR KINEMATOGRAPHER

HERBERT C. McKAY, A.R.P.S.
Dean New York Institute of Photography

The Screen-Library

THERE has been a very rapid growth recently in the film-library business, and once more we see rental arrayed against outright sales. Many and bitter are the discussions regarding this subject; but, after all, it would appear that there is room for both in the amateur world. We appear to be losing sight of the fact that amateur kinematography is just beginning. There is no doubt whatever that it will become the world's most popular hobby. With adherents coming to the standard by thousands, there will not be enough library-films to supply the demand, regardless of the method of distribution used.

The situation is in every respect analogous to the publishing industry. Films are only glorified books. Home-made films are but visual diaries compiled in a manner to have an interest which the casually scribbled diary could never have. The films allow every man to make his own books. These records of family-life will be priceless in years to come. But, with all due respect to the ambitious amateur, it is the library-film which is going to assume the most important position to the amateur projectionist.

This may sound treasonable, yet we have only to look to the still amateurs to forecast our own future position. Consider the number of serious still-amateurs who make our salon pictures. Compare this pitifully small group with the great army which visit the exhibitions, who purchase the annuals, and who in other ways enjoy the pleasure of looking upon these masterpieces. These are photographs that live. On the contrary, the casual snapshooter keeps his drugstore-finished masterpieces a short time and then they pass away into the limbo of trash-can or dusty closet corner.

Likewise, the future of amateur kinematography lies in the hands of the home projectionists. Many thousands of projectors will be sold to families which have no camera. These families will have their family records made by the enterprising neighborhood amateur; but they will depend for most of their enjoyment upon the commercial library-film.

The amateur kinematographer will continue to make his own; and, no doubt, there will be hundreds of such added to our ranks each year. We welcome them, and we shall do our best to help them over the rough path they will have to tread at first. Many, very many, of these will supplement their home-made films with library-films. Rather, they will supplement their library-films with home-made ones.

The rare expert in the field will continue to work and slave over scenario, title-board, tanks, printer, cutting-table, and tinting-baths. He will in most cases make "Salon" films—and he will then go forth and buy the commercial prints of the masterpieces of his brother artists.

The library-film is here to stay, and it is a factor with which we must reckon. We must assimilate it into the great body of amateur kinematographic endeavor.

This takes the view that amateur kinematography is a matter of film-production. This is the present status of the art; and, from all indications, there will be no change. It is true that we shall have the students and experimenters who persist in recognising a great truth—kinematography is a photographic and not a literary process. This truth is so universally ignored that it loses much of its potential significance. This may be righted in time. It will be when the experimenters, the real kinematographers, grow so numerous that their strength demands recognition; but that times lies in the future. For the present, we must regard amateur kinematography as a branch of the publishing business, one which will, perhaps, rival the present great publishing-industry.

There is hardly a branch of publishing which cannot have its counterpart in the film-production business; but after all, this concerns the amateur only indirectly. This business will be in the hands of experts and specialists.

At the present time, we have our great public libraries, our private circulating libraries, and our privately owned libraries. We borrow, rent, and purchase books. Why then, shall we not obtain our films in the same ways? There are films which we will want to keep permanently. There are films which we want to see only once or twice. The first we shall buy; the second we shall rent.

Again, there is the type of individual who wants to own his books, the typical book-lover. Then we have that other type to whom books mean little, yet who reads more or less. These individuals in kinematography will respectively purchase or rent films.

There is undoubtedly room for both sales and rental films; and the writer, for one, welcomes the growth of the film-publishing industry, which has grown so rapidly and promises to grow even more rapidly.

We face a new year! What is the year to bring forth? There is no doubt that this year will see greater advances in amateur kinematography than all the progress up to date.

PHOTO-ERA MAGAZINE, as the pioneer magazine for amateur kinematographers, will try to keep abreast of this development; and to this end, this department is to be made larger—and we hope, better—than ever before.

An expression from our readers as to the type of material they prefer, would be appreciated. It might be possible to incorporate a periodical review of current library-releases. Perhaps you wish to have an exchange-column published which will tell you where you may exchange your films for others. This is an idea which has proved very attractive in still work. Do you want to see a review of the latest additions to the current equipment and novelties? In short, this is *your* department, and we want to publish the material which you want to read.

In the near future, we shall discuss the tinting and toning of amateur films and the ways in which tint-effects may be obtained without the use of actual tinting-baths; a new set of accessories which places the amateur camera on a level with professional instruments through added flexibility; a discussion of insect-photography by which screen-images from natural size to fifty or more times natural size may be obtained; the use of the new panchromatic film with incandescent lighting-equipment; and many other new developments in this field which are of interest to the active amateur kinematographer.

The Use of Filters in Amateur Kinematography

THERE seems to be considerable confusion in the minds of amateurs regarding the proper use of filters; often—too often, indeed—the filter is used with the sole intent to "get the clouds".

There is no objection to "getting the clouds" none at all, for cloud-forms do much to enhance the beauty of a landscape; but this is far from being the sole duty of the filter.

The process of photography is dependent for its existence upon the fact that certain light-rays have a definite chemical effect upon the sensitive material of the emulsion. It so happens that although these chemically active rays are not identical with the visual rays, both groups overlap, so that the less active chemical rays are our own visible blue rays. For a long time photographic plates were sensitive only to the blue. By changing the sensitive material, it has been possible to make the silver-halides react to lower and lower wave-lengths, until we have some films which are even sensitive to red, the lowest visible wave-length. However, in all of these cases the blue remains the most active, and it is so very active that while the film is receiving a full exposure to the blue rays the lower colors have not sufficient time to act upon the emulsion. Hence, we derive but little value from the fact that our film is sensitive to colors other than blue.

As long as our film is predominantly blue-sensitive, we shall have false color-renderings, in which the blues are photographed as white and the reds as black, with even yellow and green assuming very dark, gray values. This effect has been accepted in the past, because that was the photographic effect with which we are familiar; but modern photography will not accept such false renderings, and the proficient amateur kinematographer should not accept them either.

In the face of the facts which have been given, how can the lower sensitivity of the film be used? By the use of a proper filter.

If we place before the lens a glass or gelatin-sheet which is of such color that the blue cannot readily pass it, it is evident that the blue effect will be held back. If this sheet has a color which readily passes the yellow and other lower colors, it is evident that while the blue is restrained, the yellow and lower colors will act with practically full power. This sheet of colored glass or gelatin is the familiar color-screen, ray-filter or ray-screen—without doubt one of the most useful and valuable accessories in use today.

In the case of landscapes, we have the blue sky held back, while the white clouds impress the film through their combination of all colors. This gives us a delicately gray sky with white clouds instead of the totally "bald" white sky so common in both amateur and professional work. But at the same time, the color-values of other objects are corrected and the picture is more pleasing in every way than one made without a filter.

As the filter holds back the active blue rays, it is evident that it will require a longer exposure for the slower rays to act. For this reason, the filter does require a longer exposure than normal, and the degree of increase depends wholly upon the sensitivity of the film used to the lower colors which pass readily through the filter used. The filters used in amateur kinematography are marked 2×, 3×, 4× and so forth, indicating the number of times the normal exposure is to be multiplied when using ordinary kiné-film. Filters are also useful in filming very brightly lighted scenes when the stop cannot be closed to a small enough degree.

The filter should be used in every possible shot; but there is one very important precaution to be observed.

Filters are of two types—the good and the bad. There is no halfway quality. Filters to be serviceable should be made of glass. We know that glass has refractive power. It then follows that if this is moulded or common sheet glass, the non-uniform refraction will ruin the definition of the finest anastigmat lens, rendering the filter worse than useless. On the other hand, filters made of good optical glass, and ground with absolutely parallel faces, do not injure the lens correction in the least; they are invaluable accessories. So do not buy a cheap filter. Pay three or four or five dollars for it, if necessary. Better do that than use a fifteen-cent filter and ruin a six-dollar spool of film.

This is also true of the graduated filters. These filters are so made that at one end they are deep yellow, and at the other clear glass. They are used almost exclusively in landscape-work, the deep yellow correcting the tremendous intensity of the upper sky, while the darker foreground is corrected very little if at all. Close examination of an ordinary landscape shot will show that the foreground is under-exposed, and that this error gradually lessens until normal exposure is reached in the middle distance; then it goes the other way, giving us an over-exposed sky-portion. It is obvious that the graduated filter will compensate for this.

In this case the filter is made of two pieces of finest optical glass cemented together—one clear, the other yellow. These are then ground at an angle, giving the color gradation by an actual gradation of physical thickness of the colored glass. Such a filter will give perfect satisfaction.

The amateur should by all means add to his accessories a light yellow, a medium yellow, and a graduated filter of the finest quality. He will be repaid many times over in the quality of the films which will result. But once more, do not use a cheap filter and then blame the writer for the poor film which will inevitably result. The best is none too good in optical accessories.

Camera-Angles and the News-Reel

THE news-reel editors are ever alert for the "new twist" to the subjects that make up an issue. Let a cameraman turn in a novel solution to an assignment, and he has won the admiration of the film-editor. Glory is not the only reward; the cameraman will be agreeably surprised at the amount of footage used.

The chief available means of obtaining novelty in any given picture is through the camera-angles. In a news-picture, it is the only thing that the cameraman himself can control. Many an otherwise mediocre picture has been sold solely on the merits of the angles used.

However unusual or bizarre an angle may be, there must be some logical reason to use that angle. There was a painter who was working high above the city, putting a new coat of gold-leaf on the statue that stands atop the dome of the Wisconsin State Capitol. A local cameraman was given an assignment to "get a good thrill picture of painting the statue on the capitol dome". He made the ordinary type of picture that one sees in all the news-reels; two or three introductory views of the whole capitol building, a scene showing the dome as it appears from the end of one of the capitol wings, a close-up of the painter, and a closer view of the painter at his work, photographed from the wing with a telephoto-lens. As a venture, the cameraman persuaded the painter to take an automatic

camera with him as he climbed the fifteen-foot statue. Ten minutes of demonstrated instruction familiarised the painter with the use of the view-finder, taught him how to hold the camera properly, and showed him the manner of operating the release-button. He climbed the statue and, sitting on the outstretched arm, three hundred feet above the ground, set the camera in action. This scene sold the picture; for it screened well and showed the audiences exactly how the city looked to the painter from his lofty perch. It also gave a close-up view of the face of the statue from a position few people would care to occupy.

The automatic camera is unexcelled in its ability to put across the picture made at a difficult angle. An unusual angle invariably means a dangerous, or at least a cramped, position for the cameraman. In such a place, it would be impossible to crank the regular camera. With the automatic camera, all the energies of the cameraman may be available to follow the subject, to manipulate the diaphragm, or to change the focus for a subject moving to or from the camera.

The out-of-the-ordinary use of the automatic camera has produced many of the best thrill pictures. It can be sent to get a picture alone. Let us suppose that a picture is wanted which shows the action of a steam-shovel bucket. The camera could be strapped to the boom of the steam-shovel, focused on the bucket, and set in operation. The resulting film would show the bucket gouging out a helping of dirt, swinging over the ground, and releasing the load into a waiting truck. Such an angle would show the action much better than if the picture were made from a position on the ground near the shovel. Obviously, it would be impossible for a cameraman to station himself on the end of a swinging boom, and with the automatic camera in use it is unnecessary.

Thought must be used in determining a camera-angle. There must be an object in using the particular viewpoint. It must be the best possible position to show the action wanted, or it must create an impression of the scene as it appears from another's viewpoint.

It should be a pleasure to plan out the camera-angles one wants to use in covering any particular subject. They are, in a way, a measure of the cameraman's ability and ingenuity.

WILLIAM F. STEUBER, Jr.

Painting Clouds with Light

WHEN there are no clouds, as is often the case in Southern California, the thing to do, says Karl Struss, pictorialist and cameraman, is to paint them on a backdrop with lights. This novel method of producing clouds, where none exist, was introduced by Karl Struss in filming "The Drums of Love" for United Artists under the direction of D. W. Griffith.

Griffith caused a crumbling stone-wall to be erected in a closed stage with a pearl-gray backdrop behind it. Struss's job was to light the set just as it would appear at dawn. He placed a battery of strong lights with concentrated beams to the extreme right and left of the set, so that they threw horizontal pencils of light across the drop.

With the aid of whittled pieces of cardboard to make shadows, he succeeded in getting the effect of an early morning sky, broken up with horizontal sun-clouds, very marked at the horizon and diminishing in strength in the higher heavens. It took three hours to do it; but the results were well worth the effort, Griffith contended.

The Rexo Ciné Exposure-Meter

WE recently had the opportunity to examine the Rexo Ciné Exposure-Meter. This is a small, compact device, and is undoubtedly one of the most practical calculators on the market for use with the modern ciné camera.

This meter has but two variable factors, subject and light, it being assumed that camera-speed and consequently exposure-time is constant. When the meter is set for any given conditions, only two figures are visible, and these at opposite sides of the dial, making confusion almost impossible. These two figures are for summer and winter exposures. This simplicity will be appreciated by the amateur who is not used to the manipulation of such devices.

The meter is based upon average conditions as found in most parts of the United States, and will, under most conditions, give very satisfactory results.

Now for Some Fun!

HAVE you ever sat in a movie theater and watched a swimmer make a high dive off a spring-board; then, suddenly, rise back out of the water and float gracefully backward through the air to the point from which he started?

In the vernacular of the professional, this form of photography is known as "reverse action". Literally it's the making of things that are, seem like what they aren't. It's very easily done with the Ciné-Kodak, and some of the pictures you may obtain will convulse your audiences.

For example, Dad appears on the screen in close-up. He extends his arm, and an empty banana peel suddenly flies from the ground at his feet and leaps into his hand. He gazes at it intently for a moment, gulps, and raises it to his mouth. A piece of banana appears between his lips; carefully, he sticks it onto the empty skin. He gulps again, chews a bit, and, lo! another bit of the banana appears. This he places on top of the other piece. Then he pulls the skin up about it. This ludicrous procedure continues until he has built up the entire banana. Then he folds the rest of the skin in place, holds it in his hand for a moment, so that all may see and marvel, and casually drops it into his pocket.

The next scene may find him standing, shovel in hand, before a wheelbarrow loaded with dirt. He extends the shovel toward the wheelbarrow; suddenly, a shovelful of dirt detaches itself from the pile, flies through the air and lands on his shovel. He lays it carefully on the ground, pulls the shovel from under it, and repeats the process.

There is no end to the possibilities for comedy reels of this kind. Traffic on a congested street corner all runs backwards; pictures taken from the rear of a train or trolley give the effect of having been taken from the front; an airplane hurtles through the ether, and lands, backward; a man holds a garden hose in his hand, and the water comes flying in from the side of the picture and runs *into* the nozzle! Any number of highly amusing and equally amazing situations can be thus made.

The Ciné-Kodak News.

Preparing for a Stay

TOURIST: "Can I have a couple of towels?"
Landlady: "Are you going to stay here all summer?"
Exchange.

Dissolve—The gradual change of one scene into another, made by overlapping the fade-in of one scene on the fade-out of another.

Dissolve-In—Where the picture emerges gradually from the darkened screen. "Fade-in" is a better term for this. Made by slowly opening the lens-diaphragm or by a device which opens the shutter-blades.

Dissolve-Out—Picture fades away to dark screen. "Fade-out" is a better expression. The reverse of "dissolve-in."

Double Exposure—A composite picture made by exposing the same film twice.

Double Printing—A composite picture made by printing from more than one negative on the same strip of positive film.

Dream Picture—A picture of improbable nature finally explained as being a dream.

Drums—The large reels upon which films are dried after development.

Drum System—Development of films by winding spirally on cylinders which are revolved with the lower surface in the developing solutions contained in troughs or trays. Other systems are rack, pin tray, Stinemann, and machine development.

Drunken Screw—The irregular tongue or groove on the cam of the intermittent movement which forces the claws in and out of the perforations in the film to draw the film past the gate.

Dual Rôle—Where one actor takes the part of two different characters of similar appearance. This is made possible by double exposure.

Duplex—A brand of step printer much used in motion-picture laboratories.

Dyed Film—Positive film tinted with colored dye.

Dye-Tone—A positive in which the silver-image is colored or replaced with dye.

Eastman—The name of the manufacturer of film stock and other photographic supplies.

Edinol—A developing chemical.

Editing Film—Arranging the scenes and titles of a motion-picture into proper sequence for exhibition.

Educational Films—A general term for almost any film not of dramatic or comedy nature, and not necessarily a film for instructional purposes. Scenic, travel films, industrial pictures, novelty and review pictures are all often classed as "Educational".

Fade-In—Causing the picture to emerge from darkness by increasing the exposure from nothing to normal.

Fade-Out—See Fade.

Fake—Any artificial means for accentuating a desired effect in pictures is called faking.

Farce—Exaggerated comedy.

Fancy Masks—Masks for framing the picture in the aperture-plate for decorative effect, such as heart-shape, card pip shape, arch-way, silhouette, etc.

Farmer's Reducer—A reducing-solution, the principal ingredient of which is potassium ferricyanide.

Field—The field of a lens in the angular measurement of the view which it takes. A two-inch cinematograph lens has a field of about 28°.

Filming—Producing a picture.

Film-Stock—Unexposed film, either negative or positive.

Filter—1. A device for straining impurities from water.

2. A colored glass does not transmit certain colors of light; *i.e.*, it filters light. Used to accentuate or suppress the tonal value of colors.

Flash—A very short scene.

Flash-back—See cut-back.

Focal Length—The measurement from a lens to the image when the object is at a great distance.

Focus—The point or plane in which a lens produces a sharp image. To focus is to adjust the lens so that the image of the principal objects are sharp and in the lens-field.

Focus, Back—Back focus is the distance from the outer surface of the rear lens element to the focal plane.

Fog—A fog or veil on a negative or positive; generally caused by light striking the sensitive surface from some other source than the lens. Fog may also be due to deteriorated materials or the action of impure or old chemicals.

Formaldehyde—A chemical used for hardening the emulsion when softened by heat.

Foreground—That part of a picture which represents the objects nearest the camera.

Formula—1. A recipe for compounding a solution.

2. A mathematical equation in which letters represent values to be assigned according to the problem which is to be solved.

F/System—The method of calibrating lens-diaphragms in terms of the focal length.

Effective Aperture—The concentrating of light-rays by the front lens-element makes the measured diameter of a diaphragm-opening less than its mathematically calculated equivalent. In other words, a diaphragm-opening the effect of which is the same as the calculated opening is called the effective aperture.

Elon—A developing-agent.

Emulsion—The dull coating of film, plates, or paper which is sensitive to light action.

English Weights—English and American weights and measurers are not always equivalent. Consult tables for equivalents.

Enter—A term used to designate the entrance of a character on the scene.

Episode—A section of a serial film usually in two reels.

Ernemann—Name of a German manufacturer of motion-picture cameras and apparatus.

Ether—1. A term for the intangible medium which pervades the universe and which transmits light, radiant heat, X-rays, radio-waves, and other vibrations.

2. Ether is the common name of sulphuric ether, a volatile liquid used as a solvent and anesthetic.

Exit—The departure of an actor from the scene.

Exposure—Making the impression on the emulsion by opening the shutter and allowing the lens-image to act on the sensitive surface.

Exterior—A scene made outside of a building. Usually anything made outside the studio, although exterior sets are not uncommonly built in the studio. On exteriors means working outside the studio.

Extras—A term used to indicate the supernumeraries or "extra" people who comprise the mobs, crowds, guests, or other persons who are incidental to the plot of a picture and who are usually hired by the day.

Eye-Piece—The lens-element to which the eye is applied in any telescope, microscope, binocular, focusing-device, or other optical instrument.

Factor—A number used to indicate the relation of one thing to another as regards its value for speed, time, duration, or any other purpose.

Fade—Fading of the picture to blackness by gradually decreasing the exposure to nothing. Also called fade-out.

Free Lance—A cameraman who makes pictures on his own initiative, expecting to sell them later on, or one who accepts temporary assignments for a variety of companies.

Frilling—Separation of the emulsion from its support at the edges.

Fringe—The colored outline of an image produced by an uncorrected lens.

Geneva Movement—An intermittent movement produced by a cam-and-star wheel. The movement used in most projection-machines.

Ghost—1. A ghostly apparition in pictures produced by double exposure.

2. Blurring produced in pictures where the shutter does not operate in correct synchronism with the moving film.

Gillon—Name of a French maker of cameras and motion-picture apparatus.

Glass-Work—Trick-photography in which pictures on glass are used to take the place of parts of the setting.

Glass, Ground—Glass ground or sand blasted on one side; used for a focusing-screen.

Goerz—Name of maker of Ciné lenses and camera-attachments.

Gradation—The scale of tonal values in a picture.

Graduate—A measuring vessel for fluids.

Granularity—Coarseness in the silver-grains in a photographic image.

Grease Paint—The sticks of color used by actors to prepare their faces for screen-photography.

Grind—To turn the crank of a motion-picture camera.

Halation—The ghostly halo sometimes seen about the image of a bright object in a photograph.

Halftones—The intermediate shades between white and black.

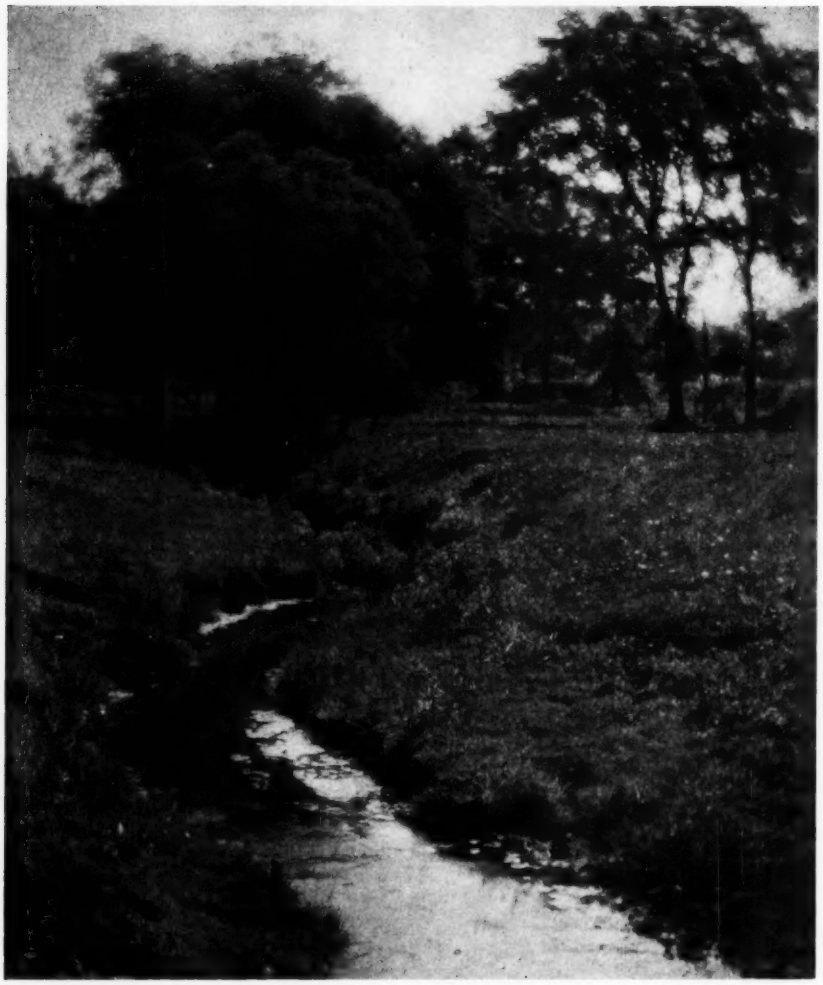
Halo—Same as Halation.

Hand-Dissolve—A device, operated by hand, to fade-in or fade-out.

Hardener—A solution used to harden photographic emulsion.

Harmonic Cam—The cam used in most motion-picture cameras to produce the intermittent movement.

Harvey Meter—A mechanical calculator designed to give the correct exposure when set for the various conditions which affect the quantity and quality of light.



MEADOW-BROOK
LEONARD PURIN
HONORABLE MENTION—LAKES, RIVERS AND BROOKS